INJURIES

Motor vehicles • Drownings • Gunshot wounds • Bicycles • Assaults • Poisonings • Fire injuries • Scald burns • Pedestrians • Suicides • Dog bites • Motorcycles • Fall injuries • Machines and equipment • Struck by an object • Boating injuries • Suffocations • Natural disasters • Terrorism • Stabbings • Electrical injuries • Unintentional injuries •

TO MASSACHUSETTS RESIDENTS • 2005

Massachusetts Department of Public Health
Injury Surveillance Program

December 2007

INJURIES TO MASSACHUSETTS RESIDENTS • 2005

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December 2007

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Table of Contents

Executive Summary

Injuries – which includes homicides, suicides, unintentional injuries, and injuries of undetermined intent – are the leading cause of death for Massachusetts residents ages 1 to 44 years, and the fourth leading cause of death for all ages combined. On an average day, in 2005, 7 Massachusetts residents died from an injury and over 2,100 were discharged from an acute care hospital for nonfatal injury (includes inpatient, observation, and emergency department visits).

This report describes the overall magnitude of the injury problem in Massachusetts, the causes of these injuries and the groups with the highest rates of injury. It is hoped that this information will assist in the development, implementation, and evaluation of effective interventions. Important findings are summarized below:

On an average day, in 2005, 7 Massachusetts residents died from an injury and over 2,100 were discharged from an acute care hospital for a nonfatal injury.

Injury Deaths, 2005

- 2,657 injury deaths occurred among MA residents during 2005, an age-adjusted rate of 39.1 per 100,000 residents.
- Most injury deaths are unintentional (70%), followed by suicide (18%) and homicide (7%).
- Poisonings were the leading cause of injury death (30%), followed by motor vehicles (17%) and suffocation/hanging (12%).
- Males had a rate of injury death greater than twice that of females (age-adjusted rates were 55.6 and 23.8 per 100,000 respectively).
- Rates for the leading causes of injury death varied considerably by age group; younger age groups (15-19 and 20-24) had the highest rates of motor vehicle traffic and firearm deaths, while poisoning death rates peaked among persons ages 45-54.
- Among persons ages 65 and older, fall-related death rates more than doubled by each successive age group (6.9, 26.2, and 67.4 per 100,000 for ages 65-74, 75-84, and 85+ respectively).
- White, non-Hispanic residents had the highest age-adjusted death rates for unintentional injury and suicide (28.1 and 7.5 per 100,000 respectively).
- Black, non-Hispanic residents had the highest age-adjusted homicide rate (17.5 per 100,000) followed by Hispanic residents (5.0 per 100,000).

Nonfatal Injuries, 2005

<u>Injury-related Hospital Stays</u>

- Among MA residents there were 65,309 hospital stays in 2005 (55,428 injury-related inpatient hospital discharges and 9,881 observation bed stays).
  - The majority of injury-related hospital stays were unintentional (79%).
  - Falls were the leading cause (44%) of injury-related hospital stays, followed by poisonings (11%) and motor vehicles (8%).
  - Males had a higher age-adjusted rate of injury-related hospital stays than females (1,008.6 and 859.1 per 100,000 respectively).
- Rates for the leading causes varied by age group; motor vehicle traffic injury were highest among persons ages 15-19 and 20-24, while those for falls began increasing at ages 35-44 and continued to rise throughout the life span.
- Charges for injury-related acute care hospital stays totaled over $1.2 billion, of which nearly half ($508 million) were associated with unintentional fall injuries.

<u>Injury-related Emergency Department Visits</u>

- In 2005, there were 705,660 injury-related emergency department (ED) visits among MA residents.
- Ninety-five percent of injury-related ED visits were unintentional.
- The leading causes of injury-related ED visits were fall (24%), struck-by or against an object (16%), motor vehicle traffic (12%), and overexertion (12%).
- Males had a higher age-adjusted rate of injury-related ED visits (12,633.5 per 100,000) than females (9.643.0 per 100,000).
- Acute care hospital charges for injury-related ED visits totaled over $671 million.

Conclusion

The data presented in this report illustrate clearly the significant burden of injuries on Massachusetts' residents. Injury is the leading cause of death among Massachusetts residents between the ages of 1 and 44 years old. In 2005, 2,657 Massachusetts residents died as a result of an injury. Injury deaths represent the most extreme, but smallest share of the overall burden of injuries among Massachusetts residents. In 2005, Massachusetts residents were for over 770,000 injuries severe enough to require treatment at an acute care hospital. Many more injuries are treated at home, in a health care center, or a physician's office. While minor injuries can result in temporary pain and inconvenience, more severe nonfatal injuries can result in long term medical care and/or life-long disability.

Fortunately, most injuries are preventable. They generally follow a predictable sequence of events. Examining how different injuries affect different groups, will allow injury prevention advocates, to improve allocation of resources, and to prioritize, plan, and design effective prevention strategies to reduce the burden of injuries among Massachusetts residents.

Methods and Notes

General Methodology

For this report, death certificate data from the Massachusetts Registry of Vital Records and Statistics, and statewide inpatient hospital discharge, observation stay, and emergency department data from the Massachusetts Division of Health Care Finance and Policy (HCFP) were used for analysis.

Death data are based on calendar year 2005, while statewide inpatient hospital discharge, observation stay, and emergency department data used for nonfatal cases are based on fiscal year 2005 (October 1, 2004 - September 30, 2005). This is a change from last year's report which used a calendar year for all databases. Creating a calendar year for nonfatal cases requires waiting an additional year to obtain the first quarter of the following fiscal year (October – December). The change was made so that we may provide the most current data available in a timely manner. Both fatal and nonfatal databases include 12 full months of data and are relatively comparable due to the static nature of injuries.

Injuries are classified according to specific codes in the International Classification of Diseases (ICD) manual. These codes provide information on the "nature and anatomic location of the injury" (e.g., multiple fractures involving skull or face, dislocation of hip, poisoning by opiates and related narcotics), "cause" of the injury, such as fall or motor vehicle crash, and the "intent" of the injury such as assault, self-inflicted, or unintentional. These codes can also be grouped into categories of particular interest such as traumatic brain injury. One category of injury that is not separately analyzed in this report is occupational. These injuries can be of any nature, cause, and intent. This report captures all injuries including those occurring on-the-job but does not provide in-depth analysis on these injuries. The Department's Occupational Health Surveillance Program has published many publications on work-related injury and disease.

For this report, an injury death was defined as a death with a valid ICD–10 external cause code in the underlying cause of death field. Injury-related hospital cases are defined as a hospital visit (hospital discharge, observation stay, or emergency department discharge) with a valid ICD-9-CM diagnostic code for injury in either the primary or any of the associated diagnosis fields (up to 16 discharge diagnoses can be submitted depending on the data set). It is also not possible to distinguish whether a case is a follow-up visit for a previous injury. Nonfatal injuries in this report, therefore, reflect the injury "burden" and not necessarily the number of acute care hospital visits explicitly caused by injury.

Throughout the report we compare fatal to nonfatal injuries, and where considered useful we provide counts and rates by specific data source (i.e., death, hospital discharge, observation stay, or ED visit). For certain tables, hospital discharges and observation stays are combined as "hospital stays" for ease of interpretation.

Crude rates, important for developing proper community-level prevention strategies are presented throughout this report. The crude rate represents the actual or "true" rate of injury for a given population. Age-adjusted rates, useful for comparing rates for populations with different age compositions are also presented for injuries overall, counties and regional maps, and for race and ethnicity.

Strengths and Limitations

One of the strengths of the data presented here is that it represents a complete census of the injury-related deaths and nonfatal acute care hospital cases in Massachusetts. Using population-based statewide databases allows us to better assess and gauge the injury burden statewide, regionally, and locally. Another, strength is the completeness of external cause codes (E-Codes) in the hospital databases. Over 98% of injury cases have a cause code assigned.

This report has several limitations. The time between data collection and it's availability for analysis is a limitation with most statewide datasets. Death data for example are not available until approximately 12-14 months after the end of a year - due to the application of necessary but extensive quality control measures.

This report includes nonfatal injury data from Massachusetts acute care hospitals only; it does not include cases requiring treatment at long-term care facilities, Veterans Administration, psychiatric or rehabilitation hospitals, nor does it

capture injuries treated at health care centers or physicians' offices. Massachusetts residents that are treated at out-of-state hospitals are not captured in the datasets used for this report.

For this report, data on race and ethnicity are presented for injury deaths only. While it is important to include race and ethnicity information to examine disparities, race and ethnicity were not mutually exclusive categories in the hospital databases for fiscal year 2005. This makes it difficult to provide accurate rates for nonfatal injuries by race and ethnicity. As of January 1, 2007 all hospital databases will capture both Hispanic ethnicity and race categories. This should result in more accurate data on nonfatal injuries by race and ethnicity.

Documentation

The data generated for this report are dependent on multiple factors, including the diagnosis and documentation of injuries and their causes in the medical record or on the death certificate. While over 98% of injury cases have a cause code assigned, they are sometimes "unspecified" codes (e.g., unspecified fall). Such limited data can result in the development of less effective prevention strategies.

Additional methodology and technical notes can be found in the appendix.

Introduction

Injuries are a major public health problem in Massachusetts and around the world. Injuries, in fact, claim more lives worldwide than any disease group. It is estimated that about one fourth of the U.S. population will sustain a nonfatal injury requiring medical attention each year.[1] These nonfatal injuries not only cause temporary pain and inconvenience, they may also be associated with life-long disability. Due to the extent of this health problem the economic impact is enormous. Nationwide, the financial cost of injuries is estimated at more than $224 billion per year.[2] In Massachusetts, total acute care hospital charges for nonfatal injury-related hospital stays and emergency department visits exceeded $1.8 billion in 2005. These costs do not include nonfatal injuries that are treated at a health care center, a physician's office, or rehabilitation facilities.

In 2005, injury – including homicides, suicides, unintentional injuries, and injuries of undetermined intent – were the leading cause of death for MA residents between the ages of 1 and 44 years and the fourth leading cause of death among all residents (Table 1). Injuries rank as one of the 10 leading causes of death in Massachusetts for all age groups with the exception of infants less than 1 year and persons ages 85 and older.

A measure of overall impact of mortality on the population is the total years of potential life lost (YPLL). Since injuries disproportionately affect the young, the YPLL for injury deaths is far greater than many diseases that are prevalent among older persons. In 2005, injury ranked second only to cancer deaths in total years of potential life lost. Injury deaths accounted for a total of 71,100 years of potential life lost among

Table 1. Ten Leading Causes of Death, Massachusetts Residents, 2005*

	Age Groups								
Rank	**<1 year**	**1-14 years**	**15-24 years**	**25-44 years**	**45-64 years**	**65-74 years**	**75-84 years**	**85+ years**	**All Ages**
1	Short gestation	Unintentional injuries	Unintentional injuries	Unintentional injuries	Cancer	Cancer	Cancer	Heart disease	Heart disease
2	Congenital mal-formations	Cancer	Homicide	Cancer	Heart disease	Heart disease	Heart disease	Cancer	Cancer
3	SIDS	Congenital mal-formations	Suicide	Heart disease	Unintentional injuries	Chronic Lower Resp. Disease	Chronic Lower Resp. Disease	Stroke	Stroke
4	Pregnancy Com-plications	Heart Disease	Cancer	Suicide	Chronic Lower Resp. Disease	Stroke	Stroke	Influenza & pneumonia	**TOTAL injuries**
5	Com-plications of placenta	Ill defined conditions	Heart disease	Ill defined conditions	Diabetes	Diabetes	Influenza & pneumonia	Alzheimer's Disease	Chronic Lower Resp. Disease
6	Intrauterine hypoxia	In situ neoplasms	Ill defined conditions	HIV /AIDS	Chronic Liver Disease	Nephritis	Alzheimer's Disease	Chronic Lower Resp. Disease	Influenza & pneumonia
7	Respiratory distress	Stroke	Congenital mal-formations	Homicide	Stroke	Influenza & pneumonia	Nephritis	Nephritis	Alzheimer's Disease
8	Bacterial sepsis of newborn	Homicide	Injuries of undetermined intent	Chronic Liver Disease	Suicide	Septicemia	Diabetes	Diabetes	Nephritis
9	Necrotizing entercolitis	Septicemia	Influenza & pneumonia	Injuries of undetermined intent	Septicemia	Unintentional injuries	Septicemia	Septicemia	Diabetes
10	Circulatory System	Suicide	Diabetes	Stroke	Influenza & pneumonia	Chronic Liver Disease	Unintentional injuries	Ill defined conditions	Septicemia

**This table is based on data from the report Massachusetts Deaths, 2005. The overall injury ranking is based on all injury intents combined.*

[1] Christofell, T., Gallagher. S. *Injury Prevention and Public Health*. Maryland: Aspen Publishers, 1999.

[2] National Center for Injury Prevention and Control. *Injury Fact Book 2001-2002*. Atlanta, GA: Centers for Disease Control and Prevention.

MA residents, or an average of 26.8 years per MA resident who died of an injury.

Injury rates in Massachusetts compare favorably with the rest of the nation. In 2004, the age-adjusted rate for injury deaths in Massachusetts was significantly lower than the U.S. (38.6 and 56.2 per 100,000 respectively).[3]

Figure 1. Injury Deaths and Nonfatal Acute Care Hospital Cases* Associated with Injury, MA Residents, 2005

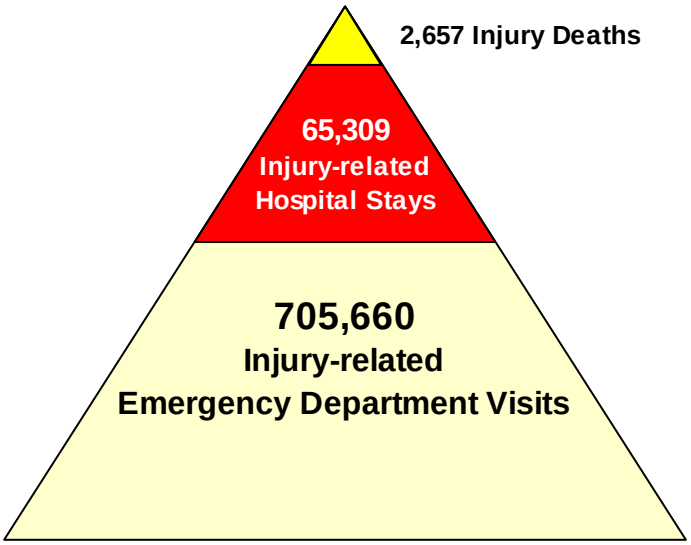


Figure 1 demonstrates that injury deaths while the most extreme outcome, represent the smallest share of the overall burden of injuries among Massachusetts residents.

Injuries are not "accidents". Nearly all injuries are preventable, and most follow a very predictable sequence of events. In 2004, to address the problem of injury deaths and nonfatal injuries, the Massachusetts Department of Public Health (MDPH) Injury Prevention and Control Program (IPCP), in collaboration with the Injury Surveillance Program (ISP), prepared *Maximizing our Efforts: The Massachusetts State Injury Prevention Plan*. The purpose of the plan is to document the problem of injury in Massachusetts and to identify steps to be taken to more effectively use existing resources, strengthen infrastructure, coordinate efforts, and prioritize injury prevention interventions. While injuries are prevalent across all demographic strata, differences in rates among causes and intents exist. By identifying the risk factors for and circumstances of these injuries we can inform the development of appropriate and accessible strategies to prevent injuries.

Historically, the most successful public health injury prevention programs combine three types of intervention strategies. These are categorized as the 3E's:

- **E**ngineering/technological interventions: Changes in the design of products or of the physical environment.
- **E**ducation/behavior change: Efforts to alter specific injury-related behaviors in the population at large or in targeted groups.
- **E**nforcement/legislative interventions: Passage and enforcement of new laws and regulations, or the increased enforcement of existing ones.

Injury prevention experience suggests that "passive" countermeasures are generally the most effective since these require little or no individual action on the part of those being protected. "Active" countermeasures are less reliable because they are more subject to human error. Child-resistant medicine caps are an example of a passive countermeasure, while action required to put on a bicycle helmet is an active countermeasure.

This report provides information on injuries to Massachusetts residents for 2005. It describes the magnitude of the problem, enumerates injuries by their causes and intents, quantifies some of the economic costs, and characterizes high-risk populations. It is intended to further the goals and objectives detailed in the Massachusetts injury prevention plan, and to assist policy makers, researchers, injury prevention advocates, and the general public in creating a safer Massachusetts to reduce the number, severity, and resulting disabilities and deaths from injury.

[3] Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. (2007). Available from: URL: www.cdc.gov/ncipc/wisqars. [October, 2007]. Age-adjusted rates for the U.S. are based on WISQARS data.

* Injury-related hospital cases are defined as a hospital visit (hospital discharge, observation stay, or emergency department discharge) with a valid ICD-9-CM diagnostic code for injury in either the primary or any of the associated diagnosis fields.

SECTION I.

Injury Overview

In 2005, there were a total of 2,657 injury deaths to Massachusetts residents and over 770,000 nonfatal acute care hospital cases (including hospital discharges, observation stays, and emergency department visits) associated with injury.

Table 2 provides a summary of the overall burden of injuries to Massachusetts residents for the year 2005. An overall count of injuries, the crude rate, and age-adjusted rate, is provided for all injuries and by sex, for each data source. Total injury counts and age-specific rates are provided by selected age groups.

In 2005:

- The overall age-adjusted injury death rate among MA residents was 39.1 per 100,000 residents.
- Males had higher rates of injury death than females with age-adjusted rates of 55.6 per 100,000 and 23.8 per 100,000 respectively.
- Males had a higher age-adjusted *rate* of nonfatal injury-related acute care hospital discharges, but

Table 2. Injury Characteristics, MA Residents, 2005

		Deaths	Nonfatal Hospital Discharges	Nonfatal Observation Bed Stays	Nonfatal Emergency Department Visits	TOTAL
Injury Totals	Number	2,657	55,428	9,881	705,660	773,626
	Crude rate	41.5	866.2	154.4	11,028.1	12,090.3
	Age-adjusted rate	39.1	798.5	150.1	11,156.3	12,144.1
Female	Number	917	29,637	4,517	314,902	349,973
	Crude rate	27.8	898.7	137.0	9,549.1	10,612.6
	Age-adjusted rate	23.8	734.9	126.7	9,643.0	10,528.4
Male	Number	1,740	25,788	5,364	390,716	423,608
	Crude rate	56.1	831.6	173.0	12,599.6	13,660.3
	Age-adjusted rate	55.6	841.1	172.2	12,633.5	13,702.5
<1 year	Number	8	345	114	4,508	4,975
	Age-specific rate	10.0	433.4	143.2	5,662.5	6249.1
1-14 years	Number	37	2,225	928	128,393	131,583
	Age-specific rate	3.3	198.8	82.9	11,473.4	11,758.5
15-24 years	Number	356	4,630	1,544	144,555	151,085
	Age-specific rate	41.8	544.3	181.5	16,993.0	17,760.6
25-44 years	Number	834	9,901	2,577	228,078	241,390
	Age-specific rate	44.4	526.8	137.1	12,136.4	12,844.7
45-64 years	Number	668	11,917	2,472	132,462	147,519
	Age-specific rate	41.3	736.8	152.8	8,190.3	9,121.3
65-74 years	Number	159	5,811	721	25,854	32,545
	Age-specific rate	40.8	1,490.0	184.9	6,629.2	8,344.8
75-84 years	Number	279	10,966	864	26,277	38,386
	Age-specific rate	87.1	3,421.7	269.6	8,230.3	12,008.6
85+ years	Number	316	9,633	661	15,530	26,140
	Age-specific rate	222.0	6,767.8	464.4	10,910.8	18,365.0

Detailed tables by sex and age group are provided by data source in Section III.
**Rates are per 100,000 residents. Rates are not calculated on counts less than five. Rates based on counts less than 20 may be unstable and should be interpreted with caution.*

females had a higher *number* of nonfatal acute care hospital discharges.

- Persons ages 85 years and older had the highest combined injury rate (fatal and nonfatal combined) followed by persons ages 15-24 years old (18,365.0 and 17,760.6 per 100,000 respectively).
- Children ages 1-14 years had the lowest injury death rate (3.3 per 100,000) while older adults ages 75-84 and 85 and older had the highest (87.1 per 100,000 and 222.0 per 100,000 respectively).
- Adults ages 65 years and older had the highest rates of injury-related hospital stays; 1,674.9, 3,691.2, and 7,232.2 per 100,000 for age groups 65-74, 75-84, and 85 and older respectively).
- Persons ages 15-24 years had the highest injury-related ED visit (16,993.0 per 100,000), followed by persons ages 25-44 years old (12,136.4 per 100,000).

Intent of Injury

Table 3 provides overall counts and rates by intent of injury. Six intent categories are presented in this report (unintentional, suicide/self-inflicted, homicide/assault, undetermined intent, other/legal, and adverse effects), as well as cases where an injury occurred but cause and intent were not assigned.

Unintentional injuries refer to those for which there was no intent to injure or harm oneself or another person. Unintentional injuries account for the vast majority of fatal and nonfatal injuries. In 2005, 92% of all injuries among Massachusetts residents were unintentional. While unintentional intent is sometimes referred to as "accidental" which for some people may imply a random or non-preventable event, the preferred term "unintentional injury" is used throughout this report.

While suicide refers to completed suicides, nonfatal self-inflicted injuries include suicide attempts, as well as other self-injurious behavior like cutting or burning oneself. There is no way to distinguish between those that are actual suicide attempts and those that are not, so the broader term "self-inflicted injury" is used to describe these cases.

In this report homicide is defined as any death purposefully inflicted by one person against one or more other persons (with the exception of those that are a result of legal intervention). Assault-related injuries are purposefully inflicted by one person against one or more other persons but do not result in death.

Undetermined intent includes injuries for which there is not enough information to make a determination of intent.

Legal/Other intent includes injuries sustained from operations related to war, and legal

Table 3. Number and Rate of Injury Deaths and Nonfatal Injury-related Acute Care Hospital Cases by Intent, MA Residents, 2005

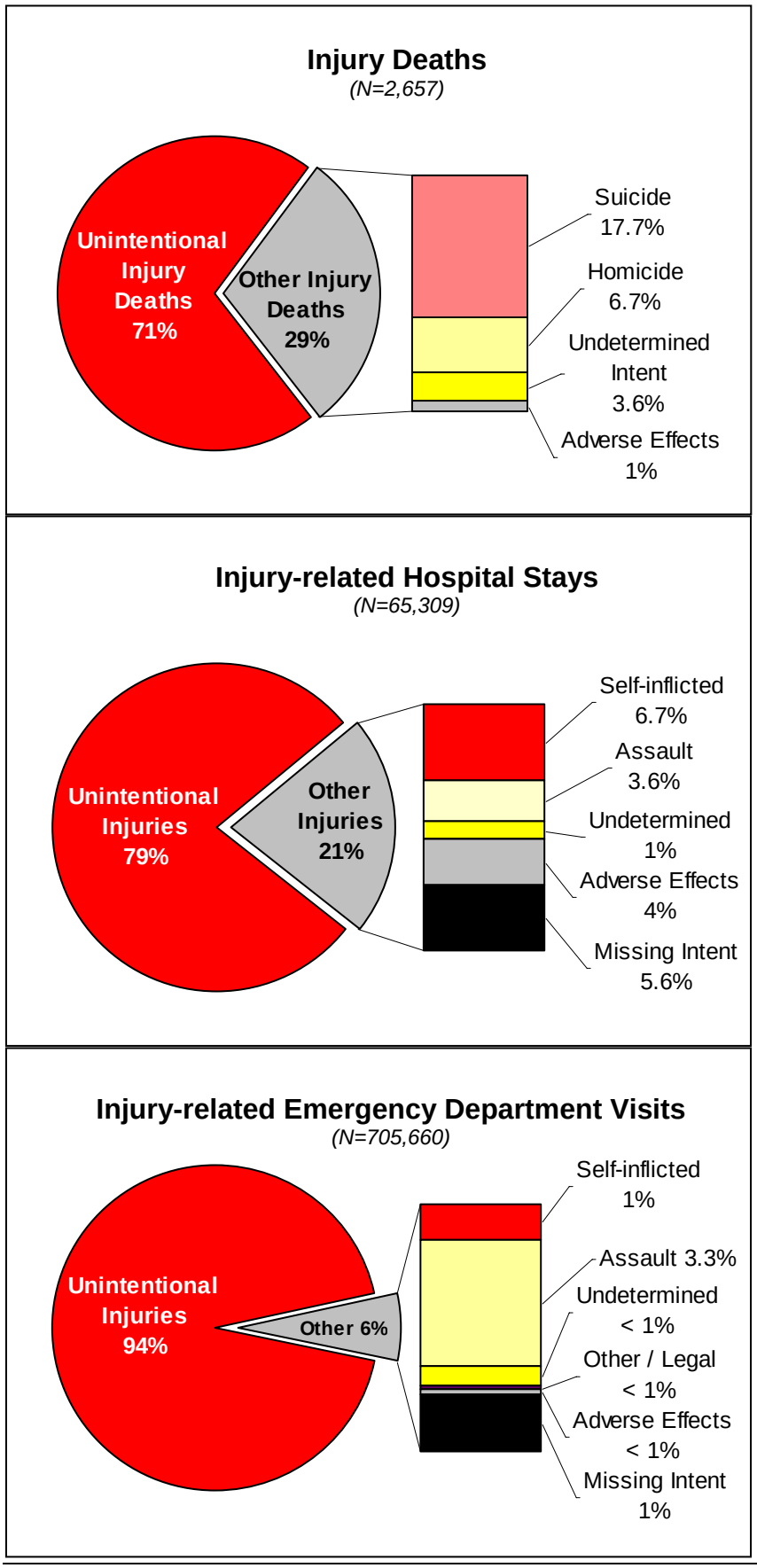
INTENT of Injury	Injury Deaths		Nonfatal Hospital Stays		Nonfatal ED Visits		Total Injuries	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Unintentional	1,883	29.4	51,379	803.0	659,448	10305.9	712,710	11138.3
Suicide and Self-Inflicted	469	7.3	4,356	68.1	6,956	108.7	11,781	184.1
Homicide and Assault	177	2.8	2,335	36.5	23,344	364.8	25,856	404.1
Undetermined Intent	95	1.5	933	14.6	3,717	58.1	4,745	74.2
Other/Legal	1	--	44	0.7	519	8.1	564	8.8
Adverse effects	32	0.5	2,607	40.7	1,141	17.8	3,780	59.1
No valid intent code assigned	0	--	3,655	57.1	10,535	164.6	14,190	221.8
TOTAL	2,657	41.5	65,309	1020.7	705,660	11028.1	773,626	12090.3

*Detailed tables for intent by sex and age group are provided in Section III. *Represents crude rates per 100,000 residents. Rates based on counts < 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts < 5.*

interventions such as police actions. Adverse effects from drugs and medical procedures also fall within the scope of injury and are presented in totals and all overview tables.

Please note that an important change occurred in 2005 affecting the number of unintentional poisoning deaths in Massachusetts. Most injury deaths are referred to the MA Office of the Chief Medical Examiner (OCME) for determination of cause and intent. In May 2005, a change in OCME policy affected the assignment of manner/intent of many poisoning deaths. Up to that point, poisoning deaths where there was no explicit evidence that the case was a suicide or homicide were assigned a manner "undetermined". With the new policy, these deaths are assigned a manner "unintentional".

Figure 2. Percent of Injury Deaths and Nonfatal Injury-related Acute Care Hospital Cases by Intent, MA Residents, 2005



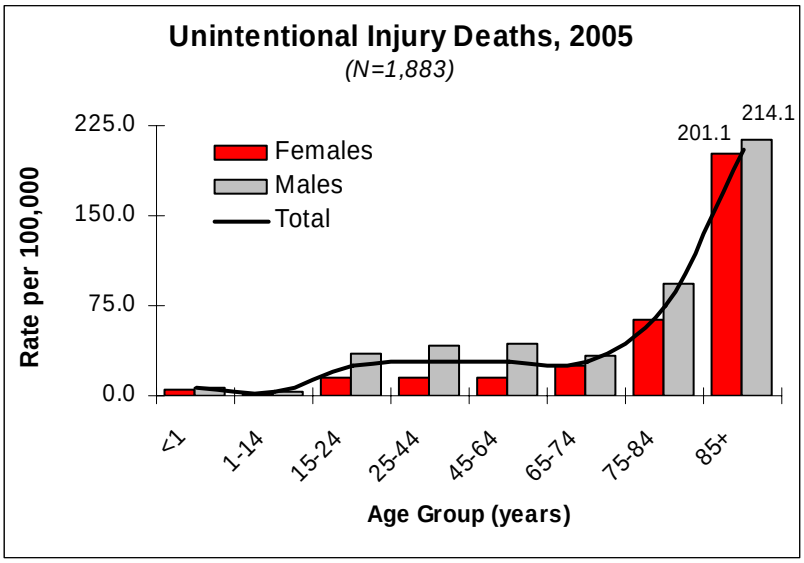
Among injury deaths, 71% were unintentional, suicide accounted for 17.7%, homicide 6.7%, undetermined intent 3.6%, and adverse effects 1%.

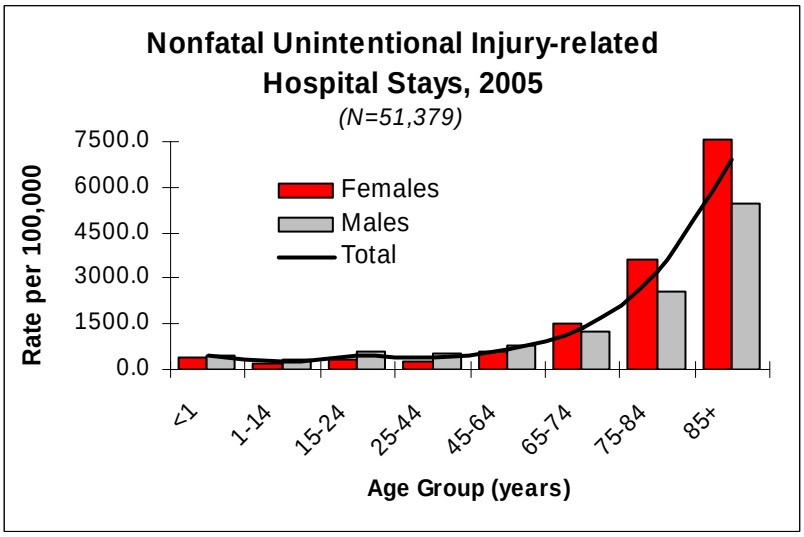
Among nonfatal injury-related hospital stays, 79% were unintentional, self-inflicted injuries accounted for 6.7%, assaults 3.6%, and adverse effects 4%.

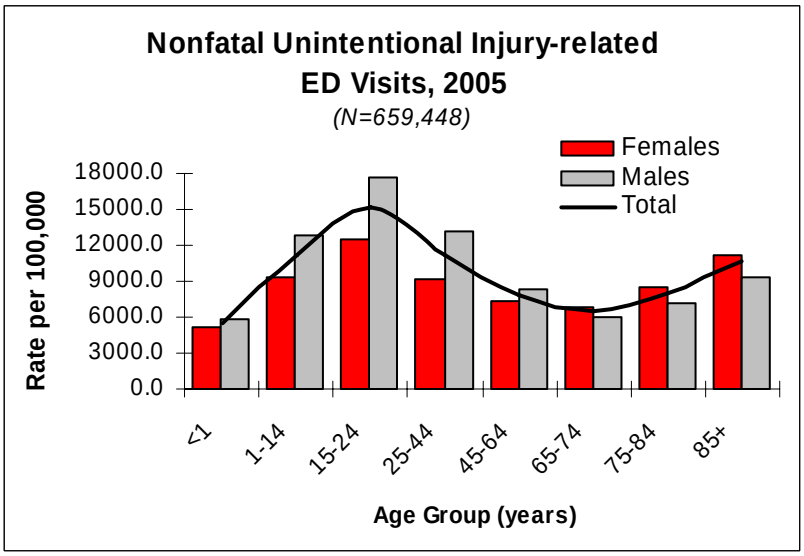
Among nonfatal injury-related emergency department visits, unintentional injuries accounted for 94% of total injuries, only 1% of injuries resulted from self-inflicted injury, while assault-related injuries accounted for 3.3% of the total.

Injury-related Cases by Intent, Sex, and Age Group

Figure 3. Deaths and Nonfatal Acute Care Hospital Cases Associated with Unintentional Injury, MA Residents, 2005







The overall unintentional injury death rate in 2005 was 29.4 per 100,000 residents.

- Unintentional injury death rates were lowest among infants less than 1 year, and children ages 1-14 years (6.3 and 2.9 per 100,000 respectively), and highest among older adults ages 75-84 years and 85 years and older (75.2 and 205.1 per 100,000 respectively).
- Males had higher rates across the life span than females, although the difference between males and females lessened for those ages 85 and older.
- White, non-Hispanic residents had the highest age-adjusted rates of unintentional injury deaths (28.1 per 100,000), followed by Hispanic residents (25.4 per 100,000).

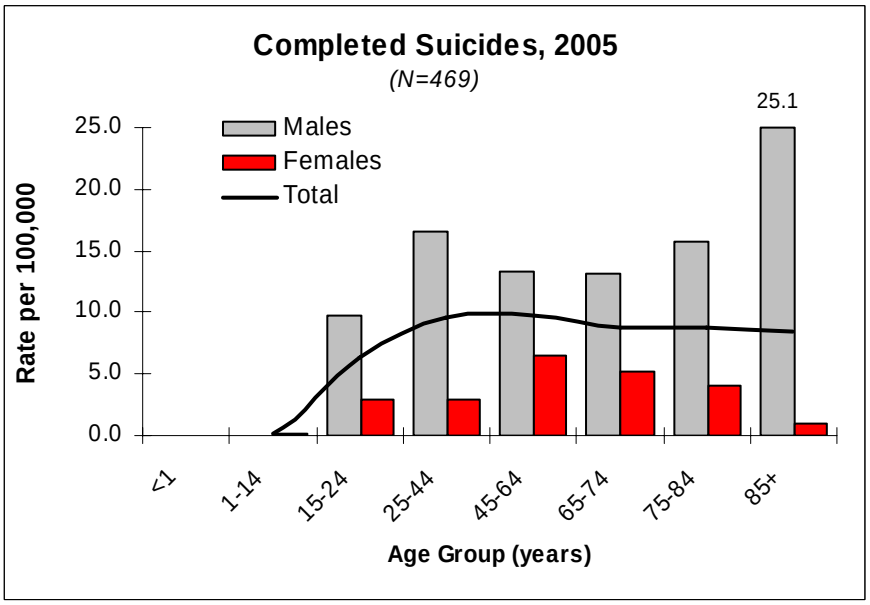
The overall rate of unintentional injury-related hospital stays in 2005 was 800.7 per 100,000.

- Children ages 1-14 years had the lowest rates of unintentional injury-related hospital stays (246.1 per 100,000); while older adults ages 65-74, 75-84, and 85 years and older had the highest rates (1,395.4, 3,228.2, and 6,928.2 per 100,000 respectively).
- Males had higher rates among age groups 45-64 years and under, while females had higher rates for all age groups over age 65.

The overall rate of unintentional injury-related ED visits in 2005 was 10,305.9 per 100,000.

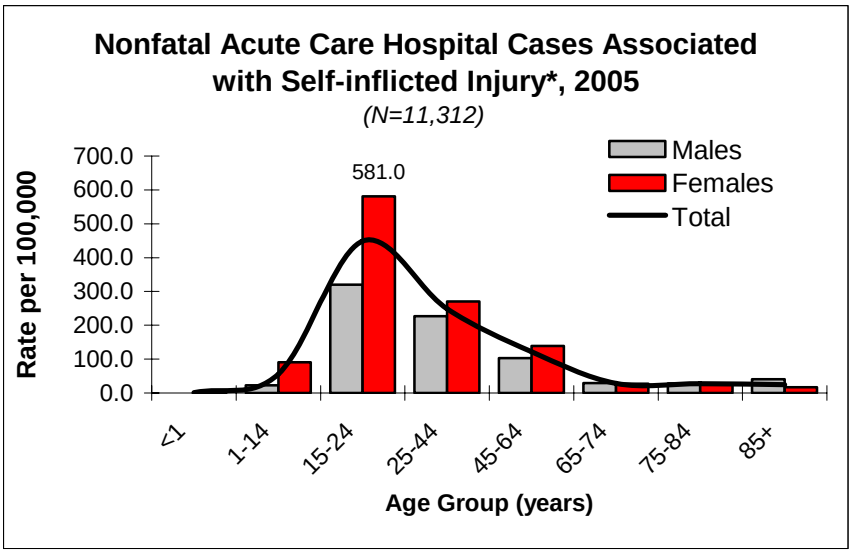
- Persons ages 1-44 years had the highest rates of unintentional injury-related ED visits with persons ages 15-24 years having the highest rate (15,179.1 per 100,000). Infants under the age of 1 year had the lowest rate of injury-related ED visits (5,558.3 per 100,000).
- Age groups with the highest injury-related ED visit rates were among those between the ages of 1 and 44 years which differs from the pattern seen in deaths and hospital stays.

Figure 4. Suicides and Nonfatal Acute Care Hospital Cases Associated with Self-Inflicted Injury, MA Residents, 2005



The overall rate of suicide in 2005 was 7.3 per 100,000 residents.

- The overall rate of completed suicide was highest among persons ages 25-44 and 45-64 (9.6 and 9.8 per 100,000 respectively).
- Males had considerably higher rates of completed suicides than females for all age groups.
- The highest suicide rates among males were for persons ages 25-44 and 85 and older (16.5 and 25.1 per 100,000 respectively). Among females the highest suicide rates were for persons ages 45-64 and 65-74 (6.5 and 5.1 per 100,000 respectively).
- White, non-Hispanic residents had higher age-adjusted rates of suicide (7.5 per 100,000) than Hispanic and Black, non-Hispanic residents (5.5 and 4.3 per 100,000 respectively).

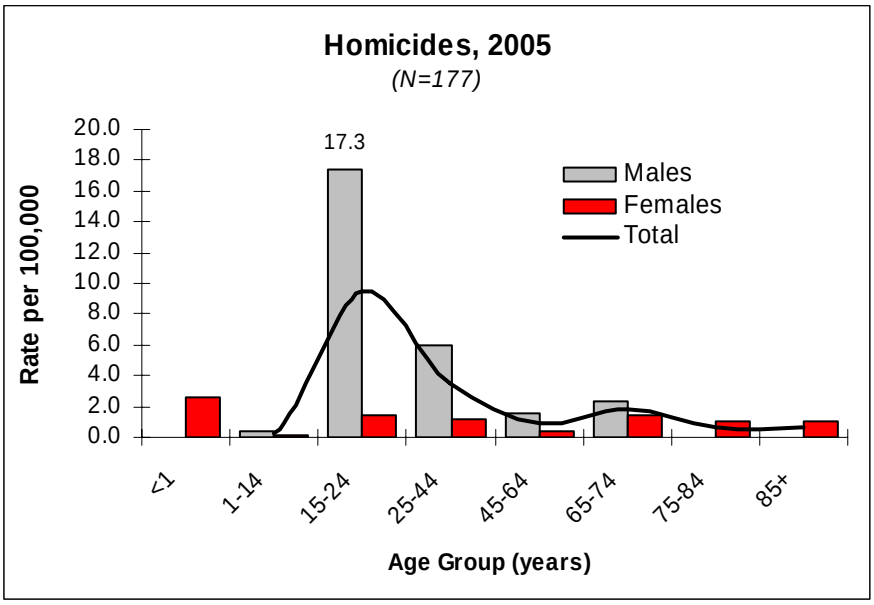


*Age patterns between hospital discharges, observation stays, and ED visits do not differ greatly and are therefore combined into one graph.

In 2005, the overall rate of nonfatal self-inflicted injuries, which includes hospital discharges, observations, and emergency department visits, was 176.8 per 100,000 residents.

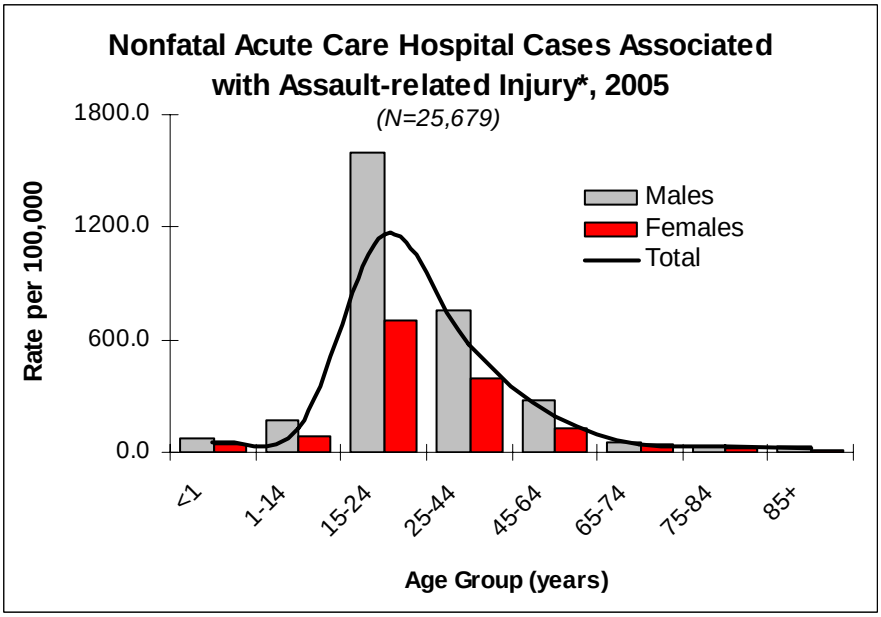
- Nonfatal self-inflicted injury rates were highest among persons 15-24 (448.5 per 100,000).
- Females had higher rates of nonfatal self-inflicted injuries than males for age groups 45-64 and younger. Males had higher rates than females beginning with the 65-74 year old age group.
- For both females and males, the highest rate of nonfatal self-inflicted injury was for persons ages 15-24 (581.0 and 320.3 per 100,000 respectively).

Figure 5. Homicides and Nonfatal Acute Care Hospital Cases Associated with Assault-related Injury, MA Residents, 2005



The overall rate of homicide in 2005 was 2.8 per 100,000 residents.

- The homicide rate was highest among persons ages 15-24 (9.5 per 100,000).
- Among males, the overall homicide rate was 4.8 per 100,000 and for females the overall rate was 0.8 per 100,000.
- Males ages 15-24 had the highest rate of homicide (17.3 per 100,000). The highest homicide rate among females was also among persons ages 15-24 (1.4 per 100,000).
- Black, non-Hispanic residents had higher age-adjusted rates of homicide (17.6 per 100,000), than Hispanic (5.0 per 100,000) and White, non-Hispanic residents (1.3 per 100,000).



In 2005, the overall rate of nonfatal assault-related injuries, which includes hospital discharges, observations, and emergency department visits, was 401.3 per 100,000 residents.

- Among nonfatal assault-related injuries the highest rates among males (1,602.6 per 100,000) and females (701.0 per 100,000) were to persons ages 15-24.

*Age patterns between hospital discharges, observation stays, and ED visits do not differ greatly and are therefore combined into one graph.

Cause of Injury

For most cause categories as shown in table 4, the mechanism of injury is apparent (e.g., firearm, machinery, drowning, and fire and burn injuries) but a few categories warrant further clarification. Poisonings refer to the damaging physiologic effects of ingestion, inhalation, or other exposure to a range of agents, including medicines and household cleaning agents, gases and vapors, and drug overdoses by legal or illicit drugs.

Table 4. Number and Rate of Injury-related Deaths and Nonfatal Acute Care Hospital Cases by Cause, MA Residents, 2005

CAUSE of Injury	Injury Deaths		Nonfatal Hospital Stays		Nonfatal ED Visits		Total Injuries	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Cut or pierce	55	0.9	2,010	31.4	75,791	1,184.5	77,856	1,216.7
Drowning, near drowning/submersion	74	1.2	45	0.7	142	2.2	261	4.1
Fall	283	4.4	28,600	447.0	171,552	2,681.0	200,435	3,132.4
Fire/Burn:	45	0.7	585	9.1	10,372	162.1	11,002	171.9
Fire/flame	44	0.0	251	3.9	1,707	26.7	2,002	31.3
Burns, hot object/substance	1	--	334	5.2	8,665	135.4	9,000	140.7
Firearm	222	3.5	412	6.4	399	6.2	1033	16.1
Hanging, strangulation, or suffocation	326	5.1	481	7.5	622	9.7	1,429	22.3
Machinery	4	--	285	4.5	4,466	69.8	4,755	74.3
Natural/Environmental:	17	0.3	1,280	20.0	27,634	431.9	28,931	452.1
Dog bites	0	--	183	2.9	6,281	98.2	6,464	101.0
Other bites & stings	0	--	642	10.0	18,219	284.7	18,861	294.8
All other (e.g., extreme cold)	17	0.3	455	7.1	3,134	49.0	3,589	56.1
Overexertion	0	--	1,420	22.2	83,982	1,312.5	85,402	1,334.7
Poisoning	802	12.5	7,088	110.8	12,943	202.3	20,833	325.6
Struck by/against	21	0.3	2,349	36.7	114,185	1,784.5	116,555	1,821.5
Transport Injuries:	496	7.8	6,536	102.1	95,997	1,500.2	103,029	1,610.1
Motor vehicle traffic-related**	446	7.0	5,349	83.6	83,697	1,308.0	89,492	1,398.6
Injury to occupant	74	1.2	3,613	56.5	72,457	1,132.4	76,144	1,190.0
Injury to motorcyclist	55	0.9	618	9.7	2,329	36.4	3,002	46.9
Injury to pedal cyclist	4	--	155	2.4	1,072	16.8	1,231	19.2
Injury to pedestrian	73	1.1	735	11.5	3,491	54.6	4,299	67.2
Injury to other	0	--	32	0.5	289	4.5	321	5.0
Injury to unspecified	240	3.8	185	2.9	4,039	63.1	4,464	69.8
Pedal cyclist, non-traffic	2	--	453	7.1	7,430	116.1	7,885	123.2
Pedestrian, non-traffic	6	0.1	64	1.0	423	6.6	493	7.7
Other land transport	32	0.5	--	--	--	--	32	0.5
Other transport	10	0.2	670	10.5	4,447	69.5	5,127	80.1
Other specified & classifiable:	15	0.2	2,763	43.2	37,692	589.1	40,470	632.5
Human bites	0	--	87	1.4	1,642	25.7	1,729	27.0
Non-powder gun (bb, pellet)	0	--	14	0.2	436	6.8	450	7.0
Other specified & classifiable	15	0.2	2,662	41.6	35,614	556.6	38,276	598.2
Other specified, not classifiable	28	0.4	1,331	20.8	11,787	184.2	13,146	205.4
Unspecified	237	3.7	3,844	60.1	46,414	725.4	50,495	789.1
Adverse effects	32	0.5	2,607	40.7	1,141	17.8	3,780	59.1
No valid cause code provided	0	--	3,673	57.4	10,541	164.7	14,214	222.1
TOTAL	2657	41.5	65,309	1,020.7	705,660	11,028.1	773,626	12,090.3

**Represents crude rates per 100,000 residents. Rates based on counts < 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts < 5. **Totals for motor vehicle traffic-related Hospital Stays and ED Visits include self-inflicted and assault-related motor vehicle injuries that are not included in subtotals.*

Natural and environmental injuries include such categories as animal and insect bites, electrical-related injuries, and weather related causes such as excessive heat or cold, storms, and floods.

The category of struck by or against an object can include injury by falling object or objects, strikes against an object or a person such as in sports, struck by a thrown object, and struck by a blunt object including fists.

Suffocation/strangulation/hanging includes: suffocation due to lack of air in closed place, by plastic bag, hanging, strangulation, and inhalation and ingestion of food or other object causing obstruction of respiratory tract (i.e., choking).

Additional definitions for selected causes can be found in the appendix.

Cause of Injury by Data Source

The leading causes of injury vary by data source.

- Among injury deaths, poisonings, including overdoses (30%), were the leading cause in 2005, followed by motor vehicle traffic (17%). Suffocation/hanging and falls accounted for 12% and 11% of the overall total, and firearms accounted for 8%.
- Among nonfatal injury-related hospital stays, the leading cause was falls (44%) followed by poisonings (11%) and motor vehicle traffic (8%).
- Falls (24%) were also the leading cause among nonfatal injury-related emergency department visits, followed by struck by or against an object (16%) and motor vehicle traffic (12%).

Figure 6. Percent of Injury Deaths and Nonfatal Injury-related Acute Care Hospital Cases by Cause, 2005

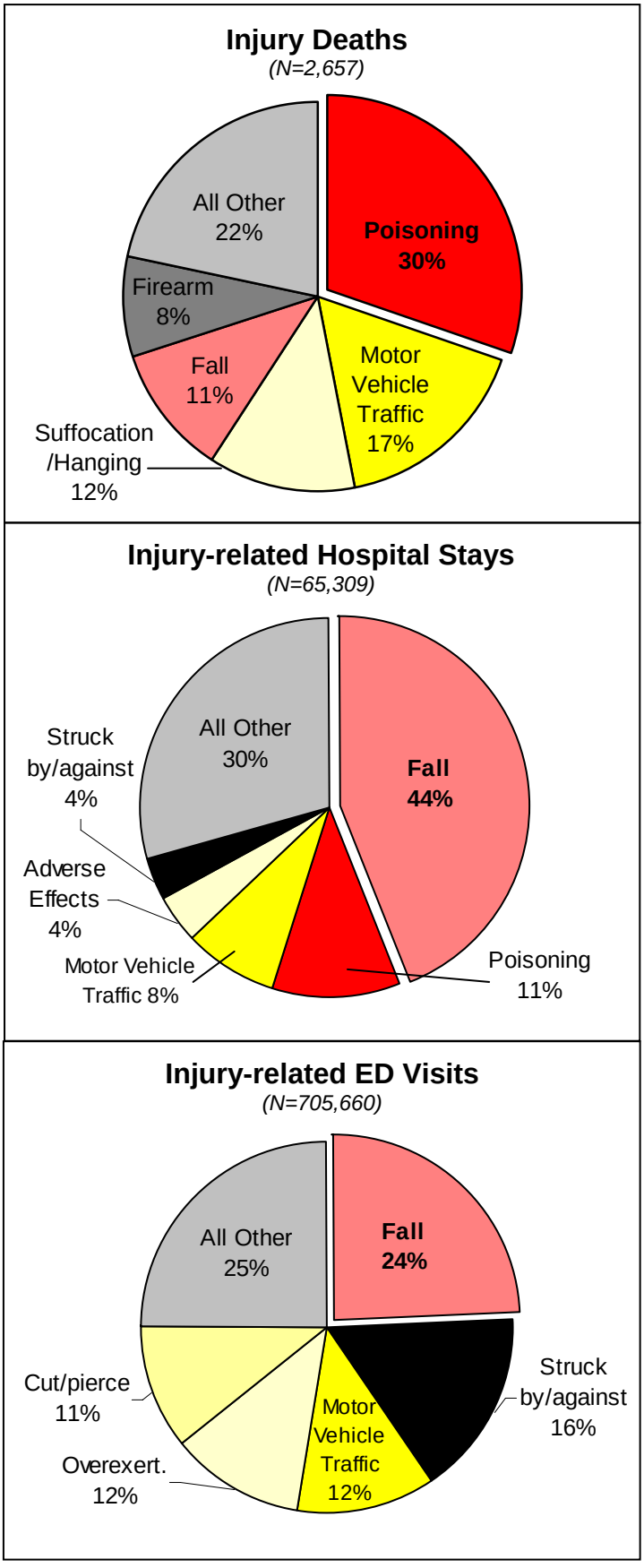
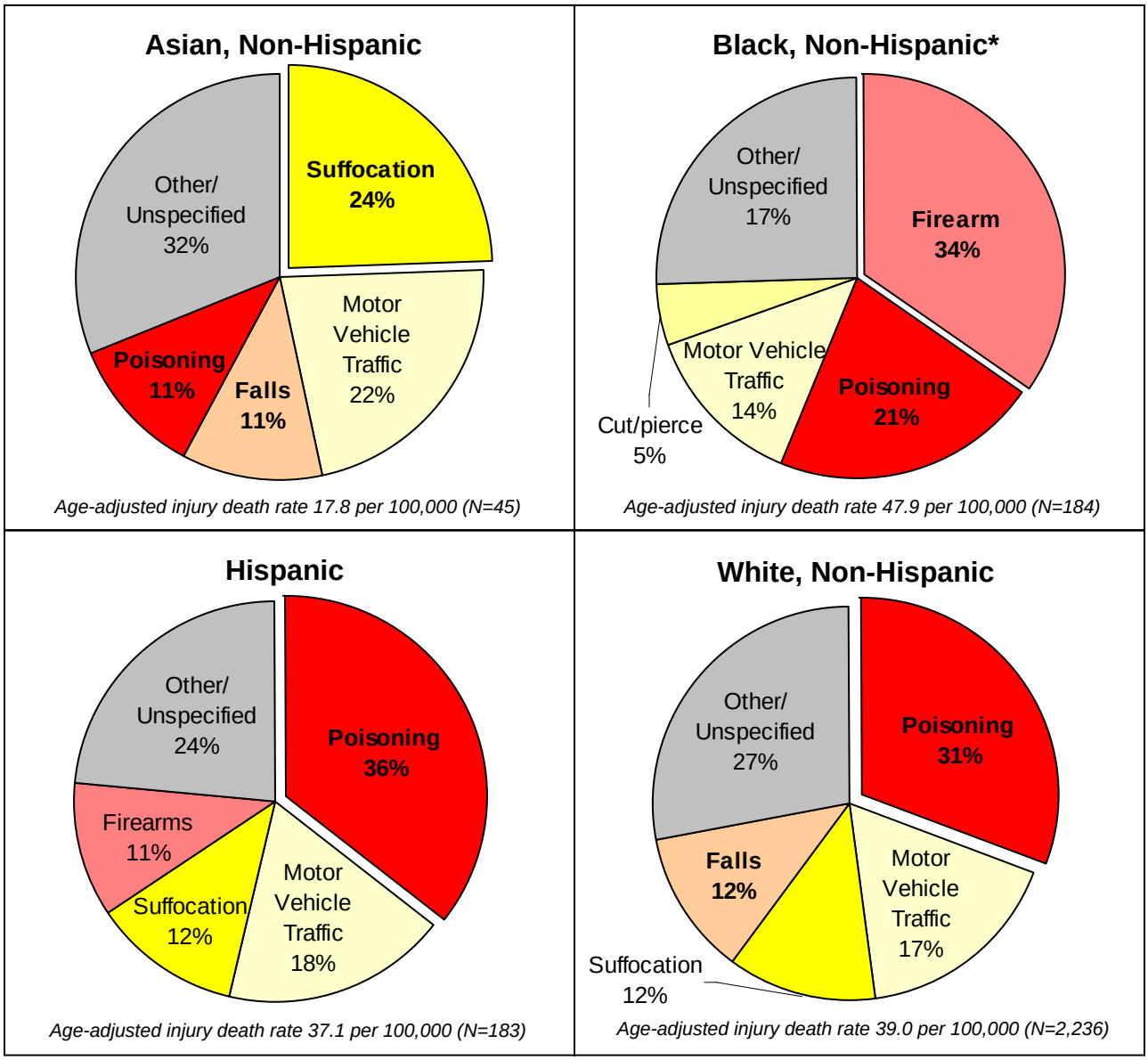


Figure 7. Percent of Injury Deaths by Race and Ethnicity by Cause, MA Residents, 2005



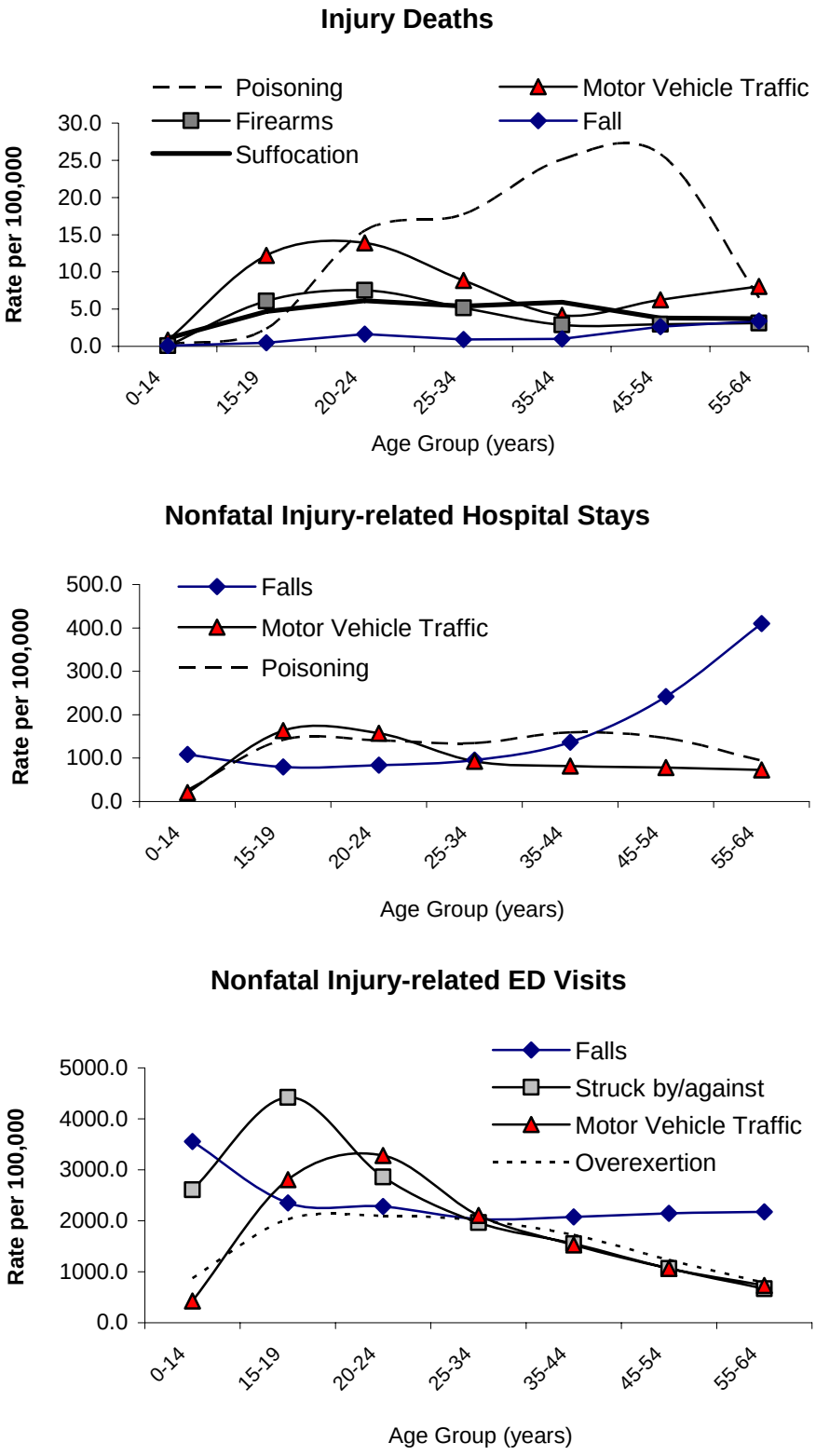
Injury death rates and causes differ by race and ethnicity. In 2005, Asian, non-Hispanic residents had the lowest age-adjusted injury death rate (17.8 per 100,000). Black, non-Hispanics had the highest age-adjusted injury death rate (47.9 per 100,000).

- Poisoning was the leading cause among Hispanic (N=65) and White, non-Hispanic residents (N=691). Poisoning death rates, however, were highest among White, non-Hispanic and Black, non-Hispanic residents (12.1 and 10.3 per 100,000 respectively).
- Motor vehicle traffic injury death was one of the leading causes for all race and ethnic groups examined. Crude rates by race and ethnic group were: Asian, non-Hispanics, 4.2 per 100,000; Black, non-Hispanics, 6.4 per 100,000; Hispanics, 6.5 per 100,000; and White, non-Hispanics, 7.2 per 100,000.
- Black, non-Hispanic residents had higher firearm injury death rates (16.5 per 100,000) than Hispanic and White, non-Hispanic residents (4.0 and 2.6 per 100,000 respectively).

** Includes persons of Cape Verdean ancestry (N=12).*

Cause of Injury-related Cases by Age Group – *Ages 0-64 Years*

Figure 8. Leading Causes of Injury Deaths and Nonfatal Injury-related Acute Care Hospital Cases by Age Group: Ages 0-64 Years, MA Residents, 2005



The leading causes of injury death for all ages combined were poisoning, motor vehicle traffic, fall, suffocation, and firearm (Table 4). However, rates for the leading causes of injury death varied considerably by age group.

- Younger age groups (15-19 and 20-24) had higher rates for motor vehicle traffic-related injuries and firearm injuries.
- Poisoning death rates peaked among persons ages 45-54 with a rate of 25.8 per 100,000.

Among hospital stays, leading injury-related causes were motor vehicle traffic, fall, and poisoning.

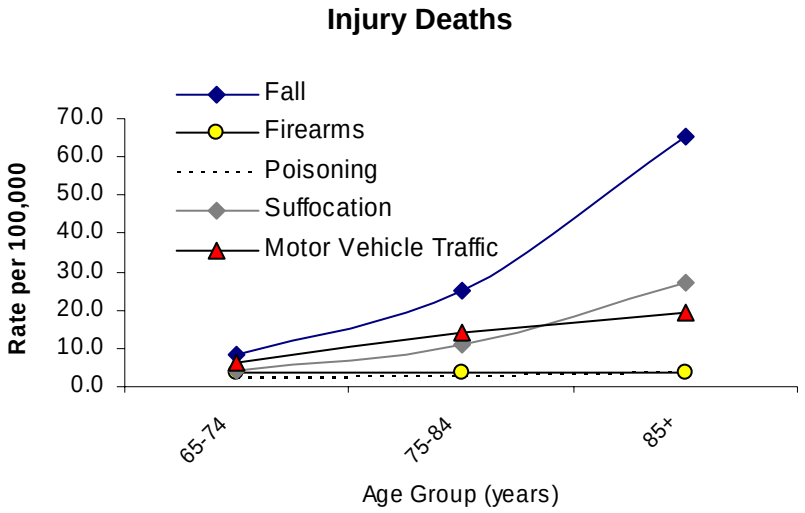
- Motor vehicle traffic hospital stay rates were highest among persons ages 15-19 and 20-24.
- Fall-related hospital stay rates began increasing at ages 25-34 and continued to rise throughout the life span. Persons ages 55-64 had a fall-related hospital stay rate of 410.0 per 100,000.

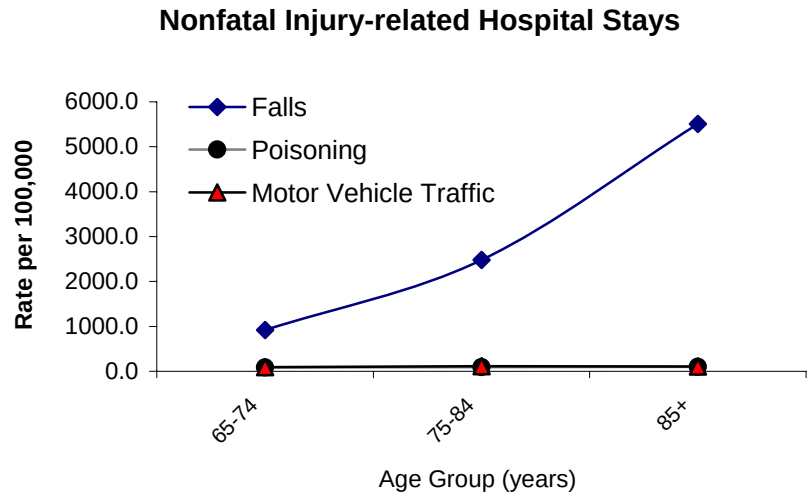
Among ED visits, leading injury-related causes were motor vehicle traffic, fall, struck-by or against, and overexertion.

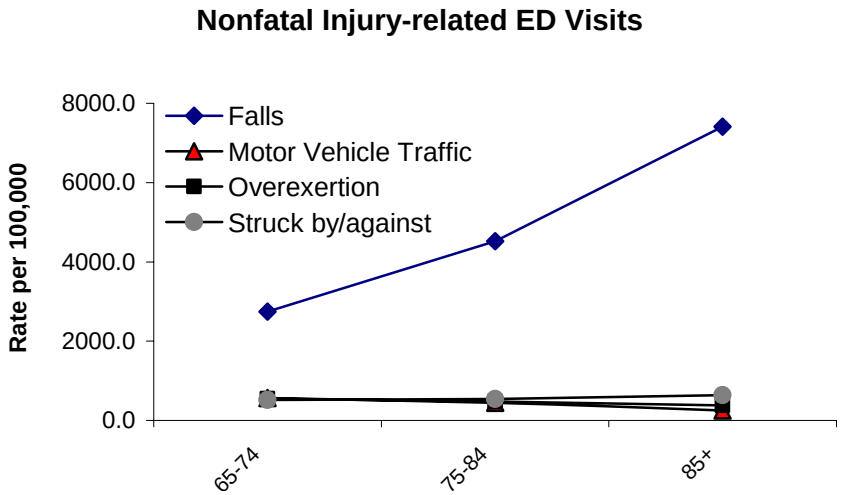
- Fall-related ED visit rates were highest among children ages 0-14 years (3554.6 per 100,000).
- Injury rates for struck-by and/or against an object were high among children and young adults, but highest among youth ages 15-19 (4,420.8 per 100,000). Motor vehicle traffic ED visit rates were highest among persons ages 15-19 and 20-24.

Cause of Injury-related Cases by Age Group – *Ages 65 and Older*

Figure 9. Leading Causes of Injury Deaths and Nonfatal Injury-related Acute Care Hospital Cases by Age Group: Ages 65 Years and Older, MA Residents, 2005







The overall rate of injury death among persons ages 65 and older was 88.4 per 100,000.

- Fall-related death rates increase substantially over the life span. Among persons ages 65 and older, rates more than doubled by each successive age group (6.9, 26.2, and 67.4 per 100,000 for ages 65-74, 75-84, and 85+ respectively).
- Motor vehicle traffic and suffocation death rates also increased, though not as markedly, by each successive age group.

Among hospital stays and emergency department visits, the pattern among fall-related injury rates was similar to that of deaths, with rates more than doubling with each successive age group.

- The rate of hospital stays associated with fall injury among persons ages 65 and over was: 916.1, 2,478.7and 5,505.3 per 100,000 for age groups 65-74, 75-84, and 85+ respectively.
- The rate of ED visits associated with fall injury among persons ages 65 and over was: 2,742.0, 4,521.2, and 7,413.4 per 100,000 for age groups 65-74, 75-84, and 85+ respectively.

Rates among other causes were relatively low and similar among all three age groups.

Table 9. Number and Rate of Injury Deaths and Nonfatal Injury-related Acute Care Hospital Cases by Intent and Selected Causes, MA Residents, 2005

INTENT and CAUSE	Injury Deaths	Nonfatal Hospital Stays	Nonfatal ED Visits	Totals[1]		
	Number	Number	Number	Total Injury Count	Rate	Case Fatality Ratio (%)
Unintentional*	1,883	51,379	659,448	712,710	11,138.3	0.3
Drowning or near drowning/submission	54	44	136	234	3.7	23.1
Fall	267	28,537	171,431	200,235	3,129.3	0.1
Firearm	3	40	152	195	3.1	1.5
Fire/burn:	42	534	10,258	10,834	169.3	0.4
Fire/flame	41	209	1,637	1,887	29.5	2.2
Burns, hot object/substance	1	325	8,621	8,947	139.8	0.0
Hanging, strangulation, or suffocation	114	440	469	1,023	16.0	11.1
Poisoning	627	2,909	6,558	10,094	157.8	6.2
Transport Injuries:	496	6,525	95,977	102,998	1,609.7	0.5
Motor vehicle traffic-related	446	5,338	83,677	89,461	1,398.1	0.5
Injury to occupant**	314	3,798	76,496	80,608	1,259.8	0.4
Injury to motorcyclist	55	618	2,329	3,002	46.9	1.8
Injury to pedal cyclist	4	155	1,072	1,231	19.2	0.3
Injury to pedestrian	73	735	3,491	4,299	67.2	1.7
Injury to other person	0	32	289	321	5.0	0.0
Pedestrian, non-traffic	6	64	423	493	7.7	1.2
Pedal cyclist, non-traffic	2	453	7,430	7,885	123.2	0.0
Other transport	42	670	4,447	5,159	80.6	0.8
Other and unspecified injuries	280	12,350	374,467	387,097	6,049.5	0.1
Suicide/Self-inflicted	469	4,356	6,956	11,781	184.1	4.0
Firearm	111	6	5	122	1.9	91.0
Hanging, strangulation, or suffocation	201	40	105	346	5.4	58.1
Poisoning	107	3,480	3,623	7,210	112.7	1.5
Other and unspecified injuries	50	830	3,223	4,103	64.1	1.2
Homicide/Assault	177	2,335	23,344	25,856	404.1	0.7
Cut or pierce	38	554	1,615	2,207	34.5	1.7
Firearm	107	328	193	628	9.8	17.0
Other and unspecified injuries	32	1,453	21,536	23,021	359.8	0.1
Injuries of Undetermined Intent	95	933	3,717	4,745	74.2	2.0
Drowning or near drowning/submission	9	1	1	11	0.2	81.8
Fall	3	18	59	80	1.3	3.8
Poisoning	68	697	2,719	3,484	54.5	2.0
Other and unspecified injuries	15	217	938	1170	18.3	1.3
All other intents/causes	33	2,633	1,660	4,326	67.6	0.8
No valid intent/cause code provided	0	3,673	10,541	14,214	222.1	0.0
TOTAL	2,657	65,309	705,660	773,626	12,090.3	0.3

*[1]The total injury count includes the number of fatal and nonfatal injury among MA residents in 2005. The rate is based on those numbers. The case fatality ratio (number of fatal injury cases among the total number of injury deaths and hospital events) is based only on Massachusetts residents who died in Massachusetts and those treated within a MA acute care hospital for an injury in 2005. MA residents who died out of state were not included in this ratio. *Total for unintentional ED Visits includes 6 cases for which intent could be determined but cause could not. **Occupant includes drivers/passengers and unspecified persons injured in motor vehicles **except** motorcycles.*

Table 9 illustrates that depending on the intent of the injury, certain causes may contribute more or less to the total injury burden in Massachusetts. Overall counts, rates, and case fatality ratios for causes can differ considerably by intent.

Case fatality ratios (i.e., here representing the percentage of fatal injury cases among the sum total of fatal and hospital-treated injury events) vary by cause and intent of injury. Firearms, for example are particularly lethal weapons, but the case fatality ratio differs considerably by intent. For self-inflicted injuries, firearms are almost always lethal; 91% result in death, among assault-related firearm injuries 17% are fatal and among unintentional injuries only 1.5% of firearm injuries results in a fatality. Self-inflicted suffocation/hanging injuries have a case fatality ratio of 58.1%, while 11.1% of unintentional suffocation/hanging injuries are fatal.

Injury by Age Group

Figures 8 and 9 illustrated the leading causes of injury by age groups across the life span. The next few pages highlight age groups separately by sex, intent of injury, leading causes, and selected findings.

Of the age groups examined, children ages 5-9 years had the lowest injury death rate (1.6 per 100,000) and adults ages 75 and older had the highest injury death rate (128.6 per 100,000). The second highest injury death rate was among persons ages 20-24 years (52.5 per 100,000).

Overall, younger age groups (ages 14 and younger) had lower rates of injury deaths, ranging from 1.6 per 100,000 among children ages 5-9 years to 10.0 per 100,000 among infants less than 1 year. Younger age groups (ages 0-14) also had lower injury-related hospital stays than older age groups, ranging from 231.6 per 100,000 among children ages 5-9 years to 576.6 per 100,000 among infants less than 1 year.

Adults ages 75 and older had the highest rate of injury-related hospital stays (4,780.2 per 100,000), followed by persons ages 65-74 (1,674.9 per 100,000).

Adolescents and young adults had the highest rates of injury-related emergency department visits. Persons ages 15-19 years had the highest rate (17,057.9 per 100,000), followed by persons ages 20-24 years (16,927.9 per 100,000). Infants less than 1 year had the lowest rate of all age groups examined (5,662.5 per 100,000).

Males overall accounted for more injury deaths and injury-related emergency department visits than females, while females accounted for more injury-related hospital stays. This pattern held for most age groups when analyzed separately. Females, however ages 75 years and older, accounted for more injury deaths (57.5%), injury-related hospital stays (71%), and injury-related emergency department visits (67.5%) than males in this age group.

Unintentional injuries accounted for the largest percentage of injury deaths, injury-related hospital stays, and injury-related emergency department visits across all age groups without exception.

Data are provided, where relevant, on traumatic brain injury (TBI) and opioid-related poisoning deaths. TBI, caused by a blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain, is considered one of the most severe injuries due to its impact on cognitive functioning and long-term medical consequences.[4] Particular age groups and certain injury causes have a higher percentage of cases associated with a TBI. Opioid-related poisoning deaths are also of concern. Trend data indicate that the rate of opioid-related poisoning deaths in Massachusetts increased 67.3% between 1999 and 2005[5]. Opioids consist of drugs derived from opium such as heroin, and those manufactured synthetically with a chemical structure similar to opium for the management of pain and other conditions, such as, morphine, methadone, codeine, fentanyl, and oxycodone.

[4] 4Hhttp://www.cdc.gov/ncipc/tbi/TBI.htm

[5] Opioids: Trends and Current Status in Massachusetts. Injury Surveillance Program, MDPH. February 2007.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages <1 Year, MA Residents, 2005

Figure 10a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages <1 Year

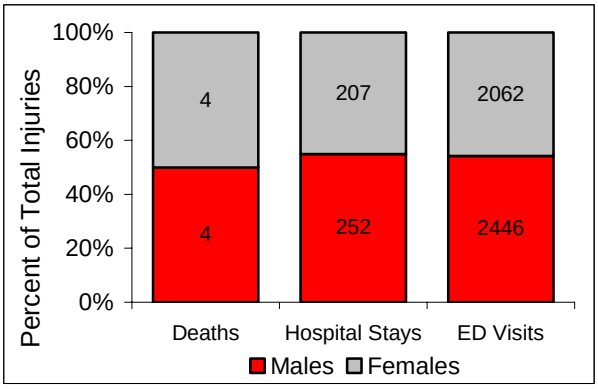


Figure 10b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages <1 Year

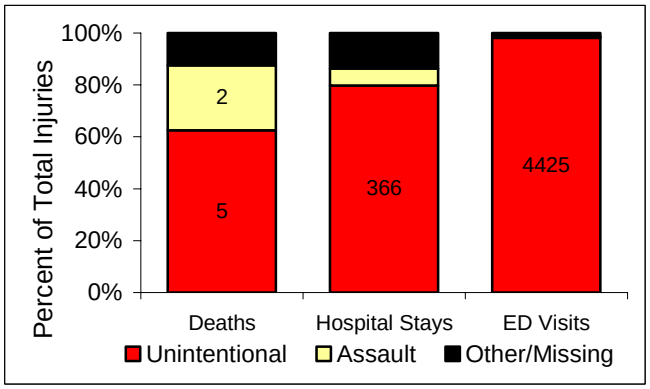


Table 10. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages <1 Year

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
Suffocation	5	6.3	Fall	190	238.7	Fall	2,313	2,905.4
Poisoning	1	--	Suffocation	26	32.7	Struck by	512	643.1
Other-classifiable	2	--	Poisoning	24	30.1	Fire / burn	185	232.4
--			Struck by	14	17.6	Overexertion	181	227.4
Other / unknown	0	--	Other / unknown	205	257.5	Other / unknown	1,317	1,654.3
TOTAL*	8	10.0	TOTAL	459	576.6	TOTAL	4,508	5,662.5

In 2005:

- Infants under the age of 1 year had an injury death rate of 10.0 per 100,000; the highest rate of injury death among children ages 14 years and younger.
    - The leading cause of death was suffocation (6.3 per 100,000).
- Males and females had the same percentage of injury death. Males accounted for a slightly higher percentage of hospital stays and ED visits.
- Unintentional injuries accounted for the majority of injury deaths (62.5%), injury-related hospital stays (79.7%), and ED visits (98.2%) among infants less than 1 year old.
- The rate of injury-related hospital stays (576.6 per 100,000) was also highest among infants <1 year when compared to other children ages 14 years and younger.
- Traumatic brain injury was associated with 42.5% of all injury-related hospital stays among infants <1 year.
- Fall was the leading cause of injury-related hospital stays (238.7 per 100,000) and ED visits (2,905.4 per 100,000) for this age group.
- Among fall-related hospital stays, 68.4% were due to a fall from one level to another, for example, from a bed or other furniture.

* Please use caution when interpreting rates based on fewer than 20 cases. Rates based on small counts (<20) can fluctuate considerably from year to year if numbers increase or decline even a small amount.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 1 – 4 Years, MA Residents, 2005

Figure 11a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 1 – 4 Years

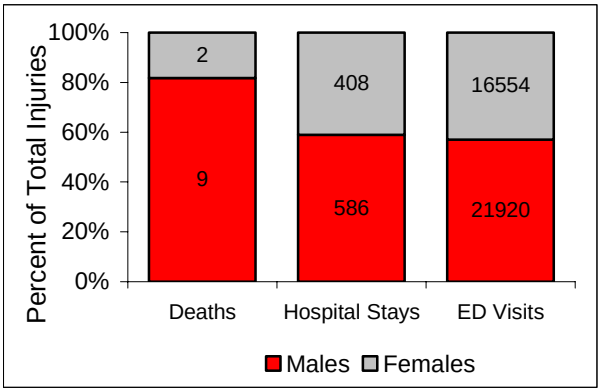


Figure 11b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 1 – 4 Years

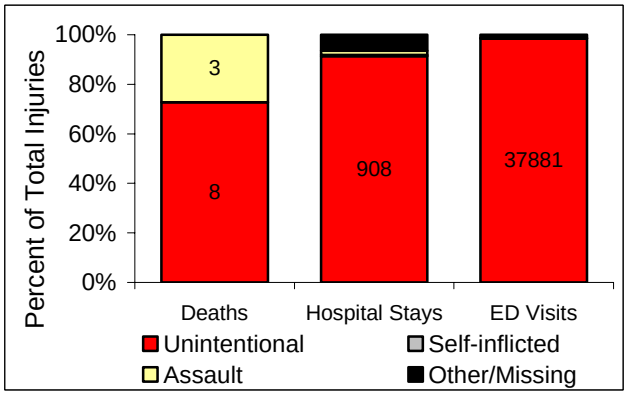


Table 11. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 1 – 4 Years

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
Drowning	5	1.6	Fall	361	113.8	Fall	15,133	4,772.1
Fire / burn	2	--	Poisoning	157	49.5	Struck by	6,615	2,086.0
MV Traffic	1	--	Natural / environ.	74	23.3	Cut / pierce	2,185	689.0
Suffocation	1	--	Struck by	43	13.6	Overexertion	2,127	670.7
Other / unknown	2	--	Other / unknown	359	113.2	Other / unknown	12,414	3,914.6
TOTAL*	11	3.5	TOTAL	994	313.4	TOTAL	38,474	12,132.4

In 2005:

- Children ages 1-4 years had an injury death rate of 3.5 per 100,000; the second lowest injury death rate among all age groups presented.
    - Drowning was the leading cause of injury death among children ages 1-4 (1.6 per 100,000).
- Among children aged 1-4 years, males had a higher percentage of injury deaths (81.8%), injury-related hospital stays (59%), and ED visits (57%) than females.
- Unintentional injuries accounted for the most injury deaths (72.7%), followed by homicide (27.3%) for children ages 1-4.
- Among hospital stays and ED Visits, unintentional injuries accounted for the majority of injuries to this age group (91.3% and 98.5%, respectively).
- Traumatic brain injury was associated with 17% of all injury-related hospital stays for this age group.
- Fall was the leading cause of injury-related hospital stays (113.8 per 100,000) and ED visits (4,772.1 per 100,000).
- Among fall-related hospital stays, 42.4% were due to a fall from one level to another including from playground equipment (N=50), 14.4% were due to a fall on or from steps and stairs, and 7.2% were due to a fall from a building or other structure.
- Among poison-related hospital stays, 23.6% were due to psychotropic agents such as antidepressants and tranquilizers, and 10.2% were due to toxic effects of lead.

* Please use caution when interpreting rates based on fewer than 20 cases. Rates based on small counts (<20) can fluctuate considerably from year to year if numbers increase or decline even a small amount.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 5 – 9 Years, MA Residents, 2005

Figure 12a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 5 – 9 Years

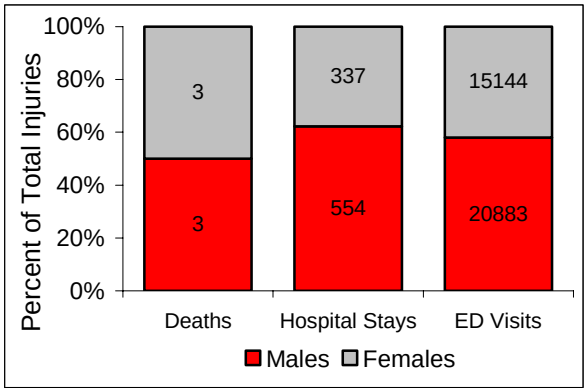


Figure 12b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 5 – 9 Years

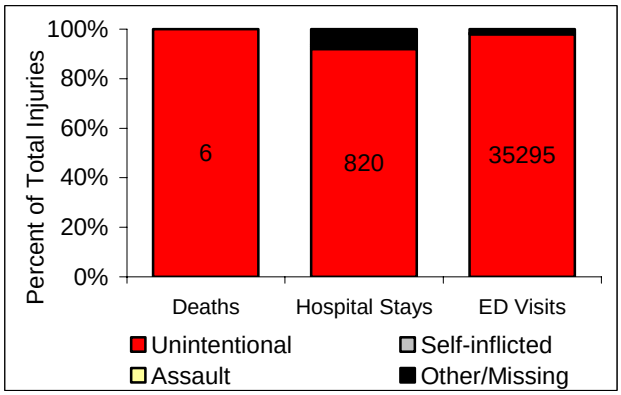


Table 12. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 5 – 9 Years

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
MV Traffic	2	--	Fall	396	102.9	Fall	11,997	3,118.0
Poisoning	1	--	MV Traffic	78	20.3	Struck by	8,115	2,109.1
Fire / burn	1	--	Struck by	61	15.9	Cut / pierce	2,777	721.7
Suffocation	1	--	Natural / environ.	49	12.7	Overexertion	1,961	509.7
Other / unknown	1	--	Other / unknown	307	79.8	Other / unknown	11,179	2,905.4
TOTAL*	6	1.6	TOTAL	891	231.6	TOTAL	36,029	9,363.8

In 2005:

- Children ages 5-9 years had the lowest injury death rate (1.6 per 100,000) of any age group presented.
- Males and females had the same percentage of injury deaths. Males accounted for a higher percentage of injury-related hospital stays (62.2%) and ED visits (58%) than females.
- 100% of injury deaths among this age group were unintentional. Unintentional injuries also accounted for the majority of hospital stays (92%) and ED visits (98%).
- Traumatic brain injury was associated with 16.6% of all injury-related hospital stays for this age group.
- The leading cause of injury-related hospital stays and ED visits was a fall (102.9 and 3,118.0 per 100,000, respectively).
- Among fall-related hospital stays, 56.3% (N=223) were due to a fall from one level to another including from playground equipment (N=142).

* Please use caution when interpreting rates based on fewer than 20 cases. Rates based on small counts (<20) can fluctuate considerably from year to year if numbers increase or decline even a small amount.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 10 – 14 Years, MA Residents, 2005

Figure 13a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 10 – 14 Years

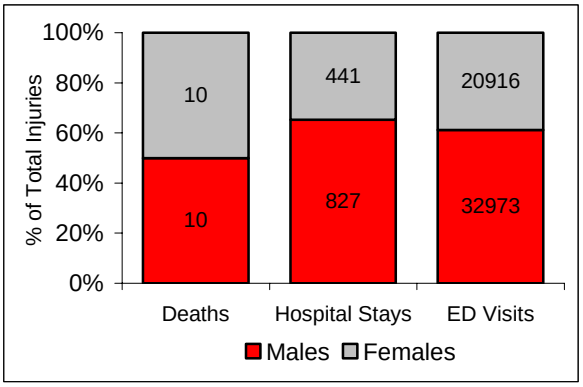


Figure 13b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 10 – 14 Years

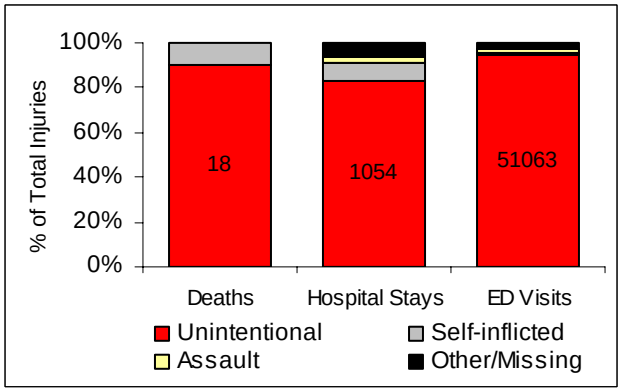


Table 13. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 10 – 14 Years

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
MV Traffic	7	1.7	Fall	354	84.9	Struck by	16,013	3,838.6
Suffocation	6	1.4	Struck by	167	40.0	Fall	13,164	3,155.6
Drowning	2	--	MV Traffic	119	28.5	Overexertion	6,141	1,472.1
Fall	1	--	Poisoning	103	24.7	Cut / pierce	4,130	990.0
Other / unknown	4	--	Other / unknown	525	125.9	Other / unknown	14,442	3,462.0
TOTAL	20	4.8	TOTAL	1,268	304.0	TOTAL	53,890	12,918.3

In 2005:

- The injury death rate among children ages 10-14 was 4.8 per 100,000.
- Males and females had the same percentage of injury deaths among children ages 10-14 years old. Males had a higher percentage of injury-related hospital stays (65.2%) and ED visits (61.2%) than females.
- The majority of injury deaths (90%), injury-related hospital stays (83.1%), and ED visits (94.8%), were unintentional.
- Self-inflicted injuries accounted for 7.6% of injury-related hospital stays for this age group.
- Traumatic brain injury was associated with 20% of all injury deaths in this age group.
- Motor vehicle traffic was the leading cause of injury death (1.7 per 100,000).
- Children ages 10-14 were most likely to be occupants in a vehicle (86%), rather than pedestrians or pedal cyclists killed by a motor vehicle.
- Among injury-related hospital stays, fall was the leading cause (84.9 per 100,000) followed by struck-by or against an object (40.0 per 100,000).
- The opposite was true for ED visits with struck-by or against an object, the leading cause of injury (3,838.6 per 100,000), followed by fall (3,155.6 per 100,000).
- Among fall-related hospital stays, 38% were due to a fall from the same level, including falls from in-line skates, skis, skateboards, and snowboards.
- 95% of “struck-by or against an object” injuries treated in the emergency department were unintentional. Most (53%) of these occurred during sports-related activity.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 15 – 19 Years, MA Residents, 2005

Figure 14a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 15 - 19 Years

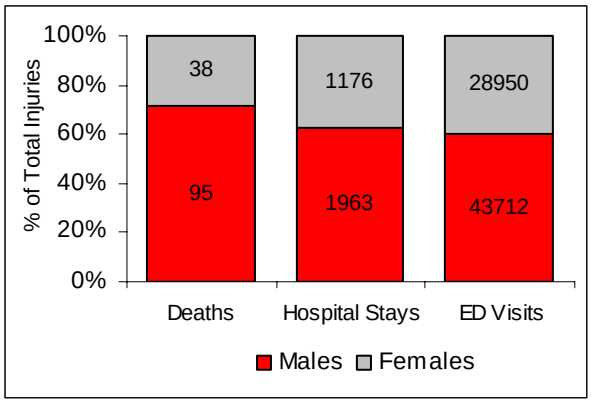


Figure 14b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 15 - 19 Years

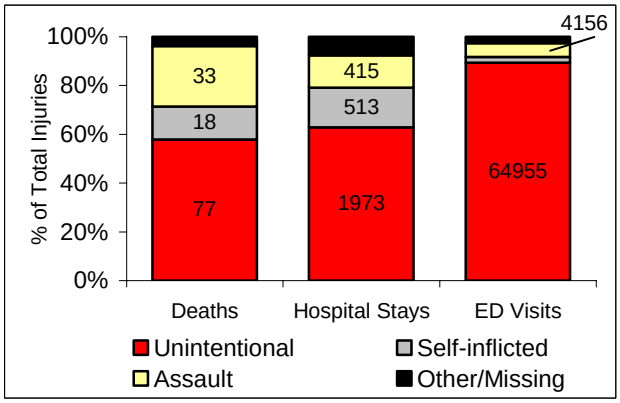


Table 14. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 15 – 19 Years

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
MV Traffic	52	12.2	MV Traffic	695	163.1	Struck by	18,832	4,420.8
Firearm	26	6.1	Poisoning	606	142.3	MV Traffic	11,963	2,808.3
Suffocation	20	4.7	Struck by	358	84.0	Fall	10,015	2,351.0
Poisoning	10	2.3	Fall	340	79.8	Overexertion	8,648	2,030.1
Other / unknown	25	5.9	Other / unknown	1140	267.6	Other / unknown	23,207	5,447.8
TOTAL	133	31.2	TOTAL	3,139	736.9	TOTAL	72,665	17,057.9

In 2005:

- Among persons ages 15-19 years the injury death rate was 31.2 per 100,000.
    - The leading cause of injury death for this age group was motor vehicle traffic-related injuries with a rate of 12.2 per 100,000 followed by firearm injuries (6.1 per 100,000).
    - All firearm deaths for this age group were homicides.
- Males aged 15-19 had a higher percentage of injury deaths (71.4%), injury-related hospital stays (62.5%), and ED visits (60.2%) than females.
- 57.9% of injury deaths were unintentional, homicides were 24.8%, and suicides 13.5%.
- Traumatic brain injury was associated with 28.6% of all injury deaths and 17.6% of hospital stays.
- Among hospital stays, unintentional injuries accounted for 62.9%, assault-
- related injuries for 13.2%, and self-inflicted injuries 16.3%.
- Motor vehicle traffic was also the leading cause of hospital stays and the second leading cause of ED visits for this age group.
- Poisoning was the second leading cause of injury-related hospital stays. 42.1% were due to analgesics, antipyretics, and antirheumatics; 30.4% were due to psychotropic agents such as antidepressants and tranquilizers.
- Youth ages 15-19 had the highest rate of injury-related ED visits (17,057.9 per 100,000) of all age groups presented. The leading cause of injury-related ED visits was struck by or against an object, of which, 86.2% were unintentional injuries, and 13.5% were assaults.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 20 – 24 Years, MA Residents, 2005

Figure 15a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 20 – 24 Years

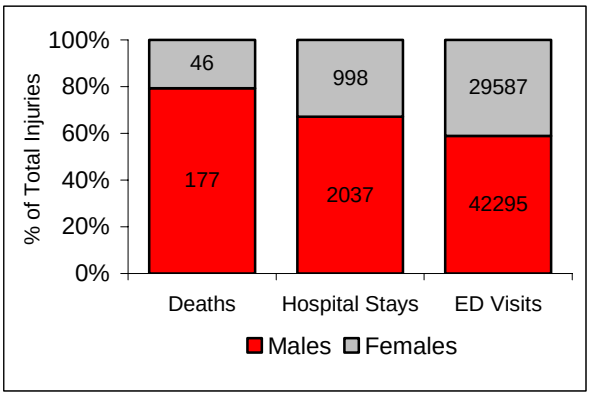


Figure 15b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 20 – 24 Years

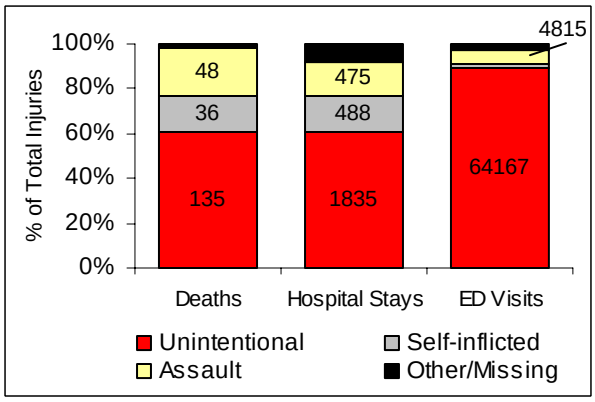


Table 15. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 20 – 24 Years

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
Poisoning	66	15.5	MV Traffic	668	157.3	MV Traffic	13,942	3,282.9
MV Traffic	59	13.9	Poisoning	599	141.0	Struck by	12,155	2,862.1
Firearm	32	7.5	Fall	357	84.1	Fall	9,683	2,280.0
Suffocation	26	6.1	Cut / pierce	300	70.6	Cut / pierce	9,333	2,197.6
Other / unknown	40	9.4	Other / unknown	1111	261.6	Other / unknown	26,777	6,305.2
TOTAL	223	52.5	TOTAL	3,035	714.6	TOTAL	71,890	16,927.9

In 2005:

- The overall injury death rate among persons ages 20-24 years was 52.5 per 100,000, and the rate of injury-related hospital stays was 714.6 per 100,000.
- Males aged 20-24 years had a higher percentage of injury deaths (79.4%), injury-related hospital stays (67.1%), and ED visits (58.8%) than females.
- The leading cause of injury death among persons 20-24 years was poisoning (15.5 per 100,000), followed by motor vehicle traffic (13.9 per 100,000) and firearm (7.5 per 100,000).
    - 83.3% of poisoning deaths were unintentional; 80.3% of all poisoning deaths were associated with an opioid such as heroin or methadone.
    - 93.8% of firearm deaths in this age group were homicides.
    - 92.3% of suffocation deaths were suicides.
- 60.5% of injury deaths were unintentional, 21.5% homicide, and 16.1% suicide.
- Traumatic brain injury was associated with 21.1% of all injury deaths and 15% of hospital stays for this age group.
- The leading cause of injury-related hospital stays was motor vehicle traffic (157.3 per 100,000), followed by poisoning (141.0 per 100,000).
    - Among motor-vehicle traffic-related injuries, 75.4% were occupants (drivers and passengers), 14.5% were motorcyclists, and 7.6% were pedestrians.
- Persons ages 20-24 had one of the highest rates of injury-related ED visits (16,927.9 per 100,000) second only to youth ages 15-19.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 25 – 44 Years, MA Residents, 2005

Figure 16a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 25 – 44 Years

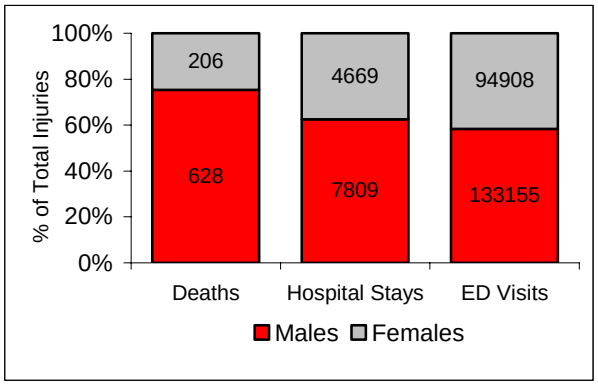


Figure 16b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 25 – 44 Years

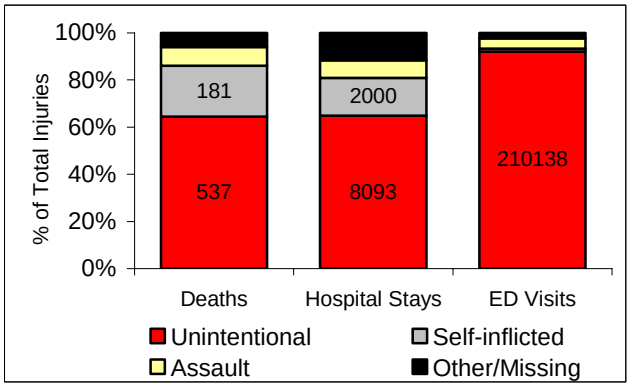


Table 16. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 25 – 44 Years

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
Poisoning	408	21.7	MV Traffic	3,471	184.7	Fall	38,629	2,055.5
MV Traffic	119	6.3	Poisoning	2,777	147.8	Overexertion	34,881	1,856.1
Suffocation	107	5.7	Fall	2,208	117.5	MV Traffic	33,687	1,792.5
Firearm	74	3.9	Cut / pierce	809	43.0	Struck by	32,743	1,742.3
Other / unknown	126	6.7	Other / unknown	3213	171.0	Other / unknown	88,138	4,690.0
TOTAL	834	44.4	TOTAL	12,478	664.0	TOTAL	228,078	12,136.4

In 2005:

- The overall injury death rate for persons ages 25-44 was 44.4 per 100,000.
- Males aged 25-44 years had a higher percentage of injury deaths (75.3%), injury-related hospital stays (62.6%), and ED visits (58.4%) than females.
- 64.4% of injury deaths to this age group were unintentional, 7.9% were homicide, and 21.7% were suicide.
- 64.9% of injury-related hospital stays were unintentional, 7.5% were assault-related, and 16% were self-inflicted.
- Unintentional injuries accounted for the majority of ED visits (92.1%).
- Poisoning was the leading cause of injury deaths (21.7 per 100,000) and the second leading cause of hospital stays for this age group (147.8 per 100,000).
- Among injury deaths:
  - 82.4% of poisoning deaths were unintentional and 9.8% were suicide. 70.6% of poisoning deaths were associated with an opioid such as heroin or methadone.
  - 85% of suffocation deaths were suicide.
  - 56.7% of firearm deaths were homicide and 41% were suicide.
- Among injury-related hospital stays, 58% of poisonings were self-inflicted, and 31.1% were unintentional.
- Among the injury-related hospital stays caused by motor vehicle traffic, the majority of injuries (67.4%) were to occupants (drivers and passengers), 17.4% motorcyclists, and 12.7% pedestrians.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 45 – 64 Years, MA Residents, 2005

Figure 17a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 45 – 64 Years

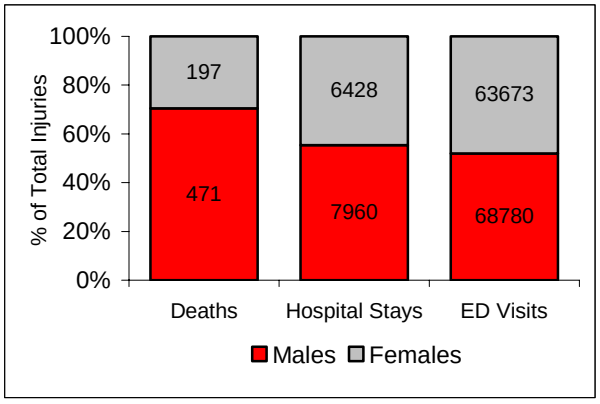


Figure 17b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 45 – 64 Years

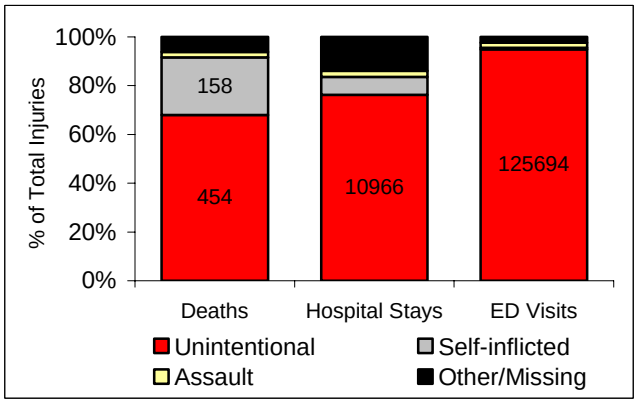


Table 17. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 45 – 64 Years

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
Poisoning	288	17.8	Fall	5,041	311.7	Fall	34,881	2,156.7
MV Traffic	113	7.0	Poisoning	2,019	124.8	Overexertion	16,951	1,048.1
Suffocation	61	3.8	MV Traffic	1,227	75.9	Cut / pierce	15,916	984.1
Firearm	49	3.0	Struck by	420	26.0	MV Traffic	14,976	926.0
Other / unknown	157	9.7	Other / unknown	5682	351.3	Other / unknown	49,738	3,075.4
TOTAL	668	41.3	TOTAL	14,389	889.7	TOTAL	132,462	8,190.3

In 2005:

- The overall injury death rate for persons ages 45-64 was 41.3 per 100,000.
- Males aged 45-64 had a higher percentage of injury deaths (70.5%), but only slightly higher percentages of injury-related hospital stays (55.3%) and ED visits (51.9%).
- 68% of injury deaths to this age group were unintentional and 23.7% were suicide.
- 76.2% of injury-related hospital stays were unintentional and 7.4% were self-inflicted.
- Unintentional injuries accounted for the majority of ED visits (94.9%).
- The three leading causes of injury death among persons 45-64 years old were poisoning (17.8 per 100,000), motor vehicle traffic, and suffocation.
- Among injury deaths:
  - 73.6% (N=212) of poisonings were unintentional and 15.6% (N=45) were suicides.
  - 66.3% of poisoning deaths were associated with an opioid, such as heroin or methadone.
  - 80.3% (N=49) of suffocation deaths were suicides.
  - 87.7% (N=43) of firearm deaths were suicides.
- Fall was the leading cause of injury-related hospital stays (311.7 per 100,000) and ED visits (2,156.7 per 100,000) to this age group.
- Among fall-related hospital stays, 33.8% were due to slipping, tripping, or stumbling, 15.3% were falls from steps or stairs, and 8.1% were falls from one level to another such as from a chair or bed.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 65 – 74 Years, MA Residents, 2005

Figure 18a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 65 – 74 Years

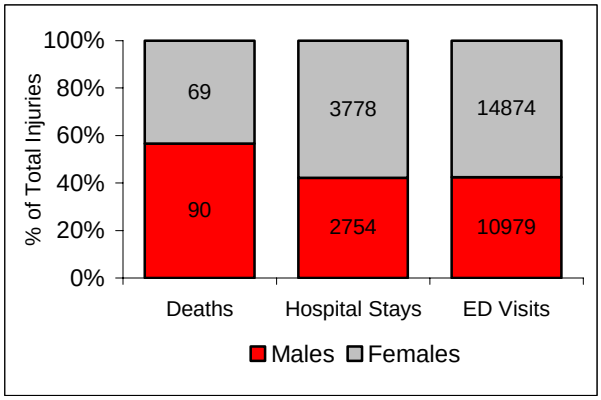


Figure 18b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 65 – 74 Years

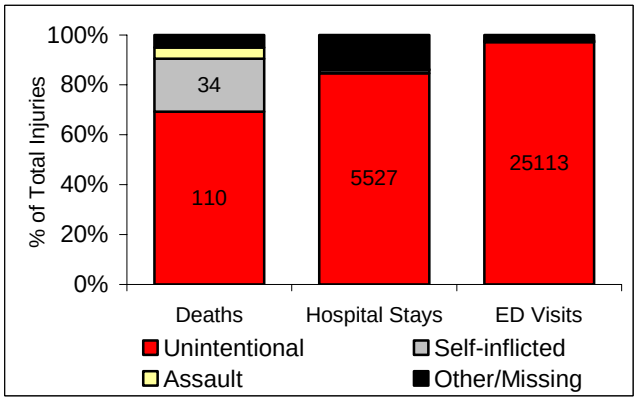


Table 18. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 65 – 74 Years

Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
MV Traffic	38	9.7	Fall	3,573	916.1	Fall	10,694	2,742.0
Fall	27	6.9	MV Traffic	348	89.2	Cut / pierce	2,408	617.4
Suffocation	27	6.9	Poisoning	328	84.1	MV Traffic	2,211	566.9
Firearm	21	5.4	Overexertion	137	35.1	Overexertion	2,128	545.6
Other / unknown	46	11.8	Other / unknown	2146	550.3	Other / unknown	8,413	2,157.2
TOTAL	159	40.8	TOTAL	6,532	1,674.9	TOTAL	25,854	6,629.2

In 2005:

- The injury death rate among persons aged 45-64 was 40.8 per 100,000.
- Males aged 45-64 years had a higher percentage of injury deaths (56.6%) than females, whereas females had higher percentages of injury-related hospital stays (57.8%) and ED visits (57.5%) than males.
- 69.2% of injury deaths were unintentional while 21.4% were suicide. The majority of hospital stays and ED visits were unintentional injuries (84.6% and 97.1% respectively).
- Traumatic brain injury was associated with 32.7% of all injury deaths for this age group; the majority from unintentional falls (38.5%) and suicide by firearm (32.7%).
- The three leading causes of injury death among persons ages 65-74 were motor vehicle traffic, fall, and suffocation.
- Among motor vehicle traffic injury deaths, 65.8% were killed as occupants of a vehicle (drivers and passengers), and 28.9% were killed as pedestrians.
- Among fall-related hospital stays, 36.8% were due to slipping, tripping, or stumbling, 9.5% were due to a fall from steps or stairs, and 9% were due to a fall from one level to another such as from a chair or bed.
- Among persons 65-74 years of age 59.3% of suffocation deaths were unintentional.

Injury-related Deaths and Acute Care Hospital Cases by Age Group: Ages 75 Years and Older, MA Residents, 2005

Figure 19a. Percent of Injury-related Deaths and Hospital Cases by Sex, Ages 75 Years and Older

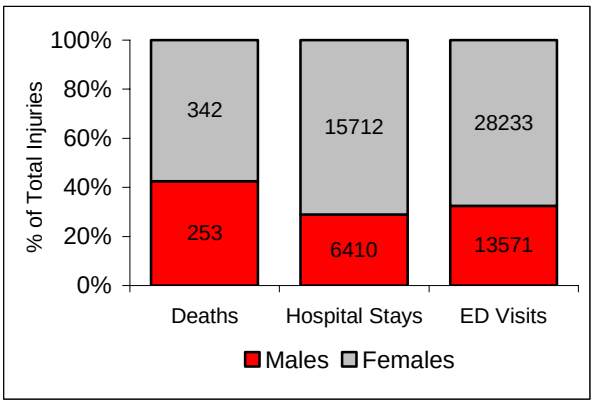


Figure 19b. Percent of Injury-related Deaths and Hospital Cases by Intent, Ages 75 Years and Older

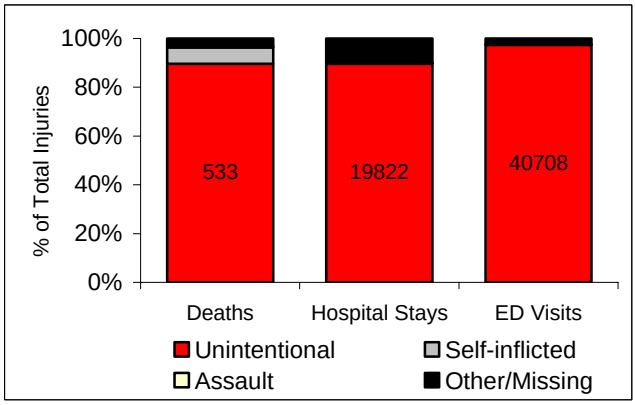


Table 19. Number and Rate per 100,000 of Injury-related Deaths and Hospital Cases by Leading Causes, Ages 75 Years and Older

Age	Injury Deaths			Injury-related Hospital Stays			Injury-related ED Visits		
	Cause	Number	Rate	Cause	Number	Rate	Cause	Number	Rate
75+ years	Fall	180	38.9	Fall	15,780	3,409.5	Fall	25,042	5,410.7
	Suffocation	72	15.6	MV Traffic	529	114.3	Struck by	2,637	569.8
	MV Traffic	55	11.9	Poisoning	443	95.7	Cut / pierce	2,241	484.2
	Firearm	19	4.1	Overexertion	360	77.8	Overexertion	2,059	444.9
	Other / unknown	269	58.1	Other / unknown	5012	1,082.9	Other / unknown	9,828	2,123.5
	TOTAL	595	128.6	TOTAL	22,124	4,780.2	TOTAL	41,807	9,033.0

In 2005:

- Persons ages 75 and older had the highest rates of injury deaths (128.6 per 100,000) and injury-related hospital stays (4,780.2 per 100,000) among all age groups examined.
- Females ages 75 and older, had a higher percentage of injury deaths (57.5%), injury-related hospitals stays (71%), and emergency department visits (67.5%), than males.
- Injury death rates for this age group were 2.4 times higher than for persons ages 20-24, the age group with the second highest injury death rate.
- The majority of injury deaths (89.6%), injury-related hospital stays (89.6%), and ED visits (97.4%) were unintentional.
- Traumatic brain injury was associated with 29.9% of all injury deaths for this age group.
- The three leading causes of injury death for persons age 75 years and older were fall, motor vehicle traffic, and suffocation.
  - 20% of fall-related deaths were due to a fall on or from stairs and steps; 10% were due to a fall on the same level; and 6% were falls from a bed, chair, or other furniture. Circumstances, unfortunately, for most fall injury deaths in this age group are unspecified (61%).
  - Suffocation deaths were mostly unintentional (87.5%) while 12.5% were suicide.
  - Among injury deaths due to motor vehicle traffic, 67.3% were killed as occupants in a vehicle and 30.9% were killed as pedestrians.
- All firearm deaths among those 75 and older (N=19) were suicides among males.

Injury Charges

Charges are presented in this report to provide an economic measurement associated with injuries overall, and for specific intents and causes.

All three databases from the Division of Health Care Finance and Policy used in this report include charges associated with each visit. Charges that are issued by the treating hospital are not necessarily the amount that it costs the hospital to treat the patients, nor is it what is ultimately paid to the hospital by the insurer/payer (i.e., these are what the hospitals charge for these injuries, not payment). Additionally, this method of economic measurement does not take into account costs associated with long-term or rehabilitative care, nor other costs associated with injury and disability such as lost wages.

In 2005, charges for all acute care hospital injuries exceeded $1.8 billion: these included inpatient hospital discharges ($1.1 billion), observation stays ($73.7 million), and emergency department visits ($671 million).

The overall mean (or average) charge for an injury-related emergency department visit in 2005 was $953 per visit. For injury-related observation bed stays the mean charge was $7,474; and for inpatient hospital discharges the mean charge was $20,839 per injury-related visit.

Charges by intent and cause for inpatient hospital discharges are presented in table 10, as they account for the largest overall percent of charges. Findings include:

- Unintentional falls had the highest charges overall for inpatient hospital discharges ($487 million). Charges for unintentional motor vehicle traffic occupant injuries were the second highest ($102 million).

- For unintentional injuries, the highest mean charges were fire-related injuries ($50,299) and motor vehicle injuries to motorcyclists ($49,938) and to pedestrians ($42,769).

- Among inpatient hospital discharges associated with self-inflicted injuries, the highest mean charges were for firearm-related cases ($70,763), followed by falls ($49,548).

- Total charges for self-inflicted injuries were highest for poisonings ($33.1 million), though the mean charge for such injuries was among the lowest ($10,987).

- For assault-related injuries, firearms were among the causes with the highest mean charges ($37,969). Other causes resulted in a higher mean charge but overall numbers for these causes were very small (N=<5).

- Struck by or against an object injuries had the highest total charges for assault-related injuries ($10.8 million).

- Inpatient hospital discharges by intent are as follows: $912 million for unintentional injuries, $74.3 million for injuries where no cause or intent was provided, $66.9 million for injuries related to adverse effects, $48.2 million for self-inflicted injuries, and $40.7 million for assault-related injuries.

Table 20. Charges for Injury-related Inpatient Hospital Discharges, MA Residents, 2005

Intent and Cause	Number	Mean Charge	Total Charges
UNINTENTIONAL			
Fall	25,723	$18,945	$487,321,591
Motor Vehicle Traffic	4358	$37,416	$163,060,715
Occupant	2925	$34,919	$102,137,633
Motorcyclist	538	$49,938	$26,866,710
Pedal cyclist	115	$32,493	$3,736,642
Pedestrian	614	$42,769	$26,259,981
Other person	25	$42,240	$1,056,011
Unspecified Person	141	$21,303	$3,003,738
Poisoning	2144	$13,068	$28,018,627
Struck by/against	1169	$16,493	$19,280,649
Overexertion	1054	$13,191	$13,903,199
Natural / environmental	1011	$10,038	$10,148,275
Dog bite	153	$10,103	$1,545,809
Other bite or sting	487	$6,981	$3,399,526
All other	371	$14,024	$5,202,940
Cut / pierce	708	$12,831	$9,084,699
Other transport	576	$29,188	$16,812,024
Fire / burn	453	$34,106	$15,449,970
Fire/flame	171	$50,299	$8,601,210
Hot object / substance burn	282	$24,286	$6,848,760
Pedal cyclist, other	345	$16,842	$5,810,548
Suffocation / hanging	394	$29,039	$11,441,187
Machinery	240	$25,794	$6,190,540
Pedestrian, other	60	$30,651	$1,839,067
Firearms	31	$40,100	$1,243,107
Near drowning / submersion	35	$17,783	$622,411
Other specified & classifiable	2239	$23,826	$53,346,666
Human bite	24	$38,555	$925,330
Non-powder gun	5	$5,229	$26,144
Other	2210	$23,708	$52,395,192
Other specified, not classifiable	787	$19,419	$15,282,646
Unspecified	2942	$18,281	$53,784,160
SELF-INFLICTED			
Poisoning	3017	$10,987	$33,147,614
Cut / pierce	529	$12,423	$6,571,628
Suffocation / hanging	36	$30,905	$1,112,572
Fire / burn	32	$31,243	$999,761
Fire/flame	30	$32,914	$987,419
Hot object / substance burn	2	$6,171	$12,342
Fall	37	$49,548	$1,833,266
Motor Vehicle Traffic	9	$35,402	$318,616
Firearm	5	$70,763	$353,815
Other natural / environmental	4	$6,511	$26,044
Other specified & classifiable	8	$43,225	$345,799
Other specified, not classifiable	120	$24,691	$2,962,912
Unspecified	32	$16,101	$515,221

Table 20. Charges for Injury-related Inpatient Hospital Discharges, MA Residents, 2005 (*continued)*

Intent and Cause	Number	Mean Charge	Total Charges
ASSAULT	Number	Mean Charge	Total Charges
Struck by / against	606	$17,891	$10,841,846
Cut / pierce	447	$22,347	$9,989,059
Firearm	251	$37,969	$9,530,203
Suffocation / hanging	1	$10,101	$10,101
Fall	7	$29,143	$203,999
Fire / burn	5	$95,219	$476,095
Fire/flame	4	$75,096	$300,384
Hot object / substance burn	1	$175,711	$175,711
Poisoning	1	$11,488	$11,488
Other specified & classifiable	155	$14,682	$2,275,727
Human bite	47	$12,030	$565,400
Non-powder gun	4	$9,589	$38,357
Other	104	$16,077	$1,671,970
Other specified, not classifiable	164	$19,390	$3,179,919
Unspecified	186	$22,552	$4,194,729
UNDETERMINED			
Poisoning	549	$13,258	$7,278,627
Firearm	19	$22,466	$426,847
Fall	16	$16,667	$266,671
Cut / pierce	19	$11,419	$216,958
Fire / burn	8	$26,198	$209,586
Fire/flame	6	$29,645	$177,870
Hot object / substance burn	2	$15,858	$31,716
Near drowning / submersion	1	$123,802	$123,802
Motor Vehicle Traffic	2	$11,846	$23,691
Natural / environmental	5	$5,988	$29,940
Other specified, not classifiable	100	$15,576	$1,557,613
Unspecified	26	$14,077	$366,010
OTHER /LEGAL			
Struck by / against	12	$15,129	$181,552
Firearm	4	$26,231	$104,924
Poisoning	1	$3,653	$3,653
Other specified & classifiable	2	$8,215	$16,429
Other specified, not classifiable	20	$31,841	$636,824
Unspecified	4	$27,733	$110,930
TOTALS BY INTENT OF INJURY			
UNINTENTIONAL	44,269	$20,616	$912,640,081
SELF-INFLICTED	3,829	$12,585	$48,187,248
ASSAULT	1,823	$22,333	$40,713,166
UNDETERMINED	745	$14,094	$10,499,745
OTHER /LEGAL	43	$24,519	$1,054,312
ADVERSE EFFECTS	2,482	$26,950	$66,890,833
CAUSE / INTENT NOT PROVIDED	2,200	$33,769	$74,290,927
Injuries with no charges listed	37	*n/a*	*n/a*
TOTAL	**55,391**	**$20,839**	**$1,154,276,312**

SECTION II.

Regional and Community Level Data, MA Residents, 2005

Location for regional and community level data is based on the patient's city or town of residence. Most rates provided by region and local community are crude rates (number of injuries per 100,000 population), but some rates have been age-adjusted for comparison purposes. Counts are provided for total injury deaths and nonfatal injuries and for selected causes. Total injury deaths are provided as death data are public record. Databases that capture nonfatal injuries are not public record and therefore counts less than seven are suppressed for patient confidentiality.

MASSACHUSETTS COUNTIES:
There are fourteen counties in Massachusetts: Barnstable, Berkshire, Bristol, Dukes, Essex, Franklin, Hampden, Hampshire, Middlesex, Nantucket, Norfolk, Plymouth, Worcester, and Suffolk.

HEALTH AND HUMAN SERVICES REGIONS:
The Executive Office of Health and Human Services (EOHHS) uses six geographical regions to provide coordination of care and administrative services throughout the Commonwealth. The regions include: Western, Central, Northeast, Metro West, Boston, and Southeast. A listing of cities and towns within each region is located on pages 53-54.

COMMUNITY HEALTH NETWORK AREA:
A Community Health Network Area (CHNA) is a coalition of members from public, non-profit, and private sectors working to improve public health within their community. The 351 individual cities and towns in Massachusetts are grouped into 27 regions (CHNAs). These coalitions mobilize around key health issues that impact their community, promote prevention efforts, enhance access to care, and provide opportunities for more collaboration among agencies. A listing of cities and towns within each CHNA is provided on pages 55-57.

REGIONAL PLANNING AGENCIES:
There are thirteen Regional Planning Agencies (RPA) in Massachusetts. These groups were developed to help communities plan and implement improvements for transportation, public transit, the environment, and land use, as well as economic and community development. A listing of cities and towns within each region is located on pages 58-59.

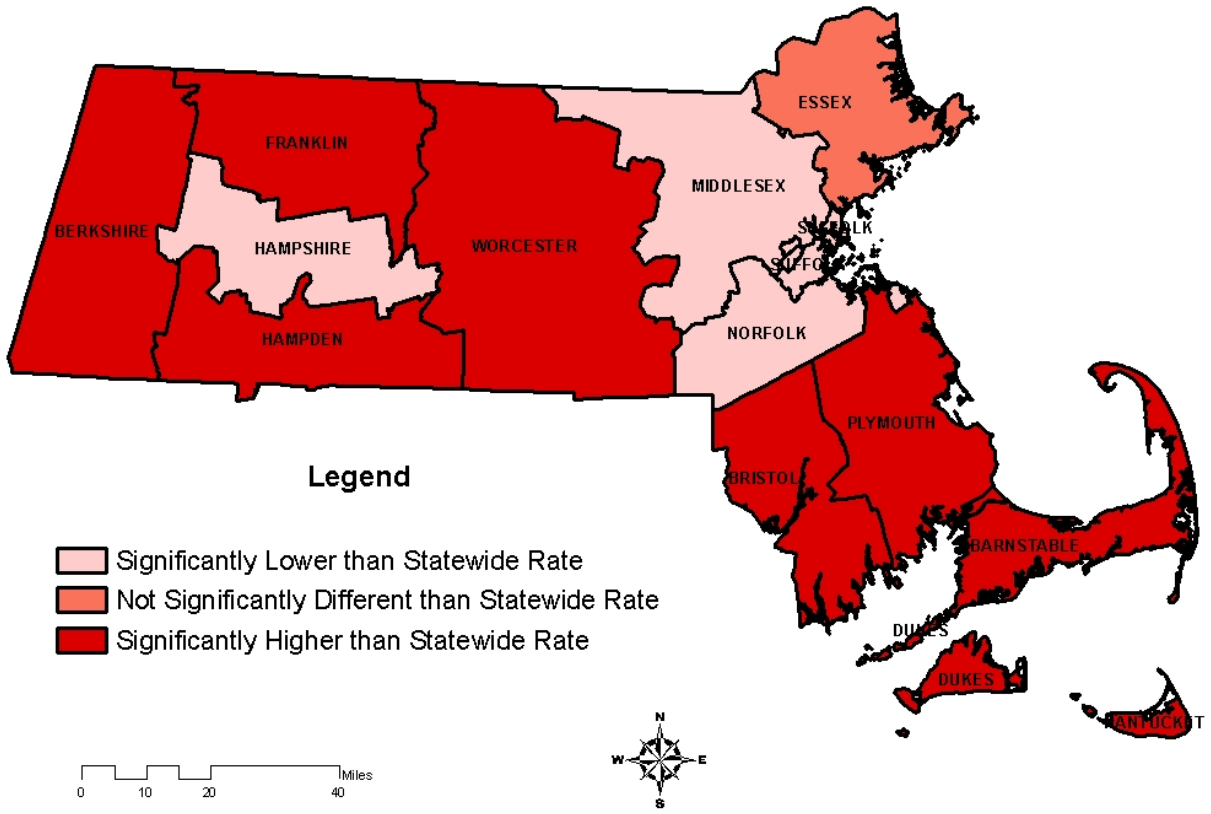
MASSACHUSETTS CITIES AND TOWNS:
Crude rates are provided by all 351 cities and towns for overall fatal and nonfatal injuries combined.

Table 21. Injury-related Deaths and Nonfatal Hospital Cases by Selected Causes and Intents by County, MA Residents, 2005

	Total Injuries				Unintentional Motor Vehicle Traffic[3]		Unintentional Falls Among Elders		Unintentional and Undetermined Poisonings[4]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Massachusetts	2,657	770,969	773,626	12,018.5	446	89,015	206	55,082	695	12,883	177	25,679	469	11,312
Barnstable	120	33,019	33,139	14,630.6	29	3,147	16	3,466	22	442	2	870	17	419
Berkshire	68	21,970	22,038	16,699.9	11	1,770	9	1,651	18	302	3	572	8	324
Bristol	265	81,055	81,320	14,847.2	59	9,178	26	5,021	86	1,101	17	2,781	28	1,287
Dukes	6	3,259	3,265	20,922.8	1	159	1	262	2	53	0	53	1	38
Essex	315	88,418	88,733	11,823.8	51	9,405	19	6,706	96	1,357	12	2,679	65	1,263
Franklin	33	9,009	9,042	12,486.4	4	701	5	524	5	142	1	175	10	127
Hampden	236	61,806	62,042	13,292.7	43	9,639	14	3,828	51	1,535	26	2,702	48	1,000
Hampshire	51	15,057	15,108	9,811.6	9	1,562	4	1,154	2	238	1	365	10	310
Middlesex	511	144,834	145,345	9,926.7	72	15,322	42	12,060	135	1,964	22	3,657	107	1,900
Nantucket	2	2,270	2,272	22,506.2	0	72	0	120	1	18	0	37	1	8
Norfolk	218	69,163	69,381	10,568.8	36	7,109	16	6,290	63	1,093	3	1,679	43	884
Plymouth	220	65,534	65,754	13,211.9	41	8,959	16	3,917	54	863	11	1,884	39	845
Suffolk	304	78,835	79,139	12,078.9	29	12,438	17	4,301	91	2,276	68	5,470	32	1,063
Worcester	308	96,740	97,048	12,316.6	61	9,554	21	5,782	69	1,499	11	2,755	60	1,845

1. Crude rates are per 100,000 residents.
2. Age-adjusted rates are per 100,000 residents, and adjusted to the 2000 US Standard Population.
3. Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
4. Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Map 1. Age-adjusted Rate for Injury-related Deaths and Hospital Cases by County of Residence, 2005



	Total Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury			
	Deaths	Nonfatal	Total	Age-adjusted Rate[2]
Massachusetts	2,657	770,969	773,626	12,076.1
Barnstable	120	33,019	33,139	15,452.5
Berkshire	68	21,970	22,038	17,297.2
Bristol	265	81,055	81,320	15,044.2
Dukes	6	3,259	3,265	21,411.8
Essex	315	88,418	88,733	11,991.1
Franklin	33	9,009	9,042	12,839.1
Hampden	236	61,806	62,042	13,392.0
Hampshire	51	15,057	15,108	10,076.8
Middlesex	511	144,834	145,345	10,002.3
Nantucket	2	2,270	2,272	23,245.2
Norfolk	218	69,163	69,381	10,780.3
Plymouth	220	65,534	65,754	13,489.0
Suffolk	304	78,835	79,139	11,916.1
Worcester	308	96,740	97,048	12,390.0

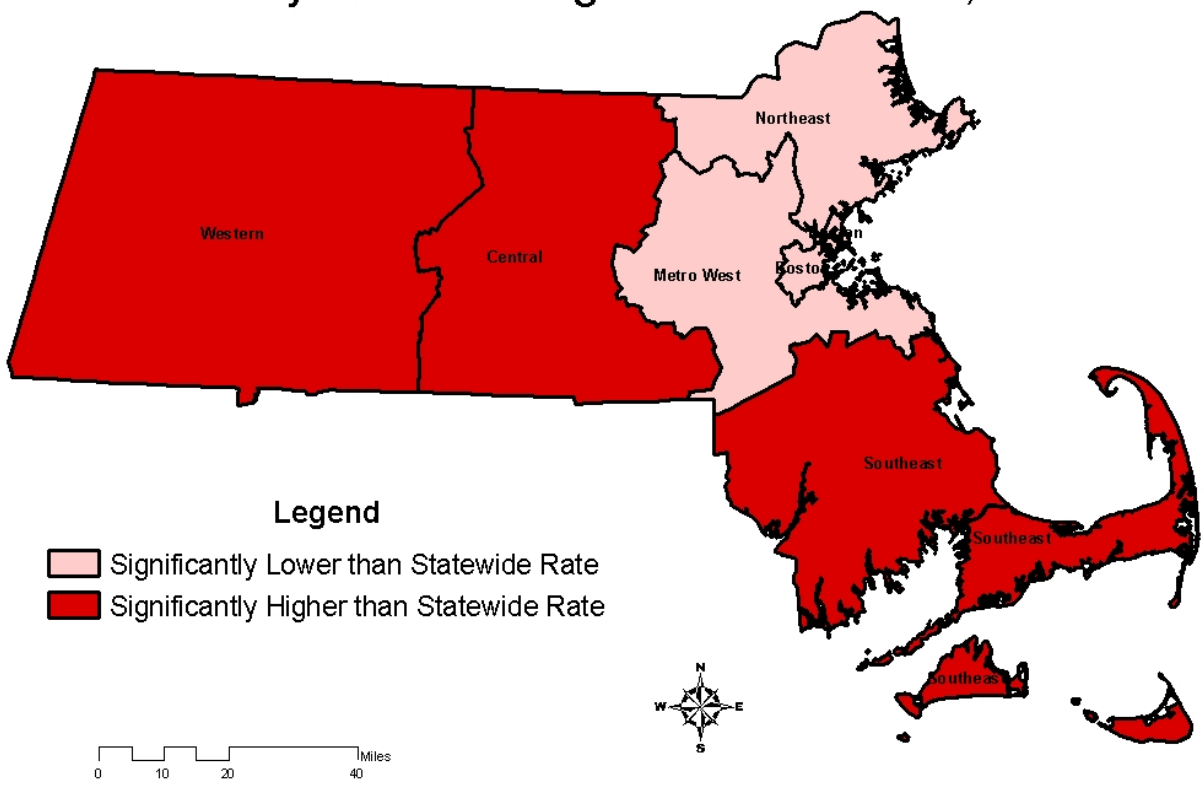
[2] Age-adjusted rates are per 100,000 residents and adjusted to the 2000 US Standard Population.
Sources: Registry of Vital Records and Statistics, MDPH; MA Inpatient Hospital Discharge Database, MA Outpatient Observation Stay Database, MA Outpatient Emergency Department Database, MA Division of Health Care Finance and Policy; Massachusetts Executive Office of Environmental Affairs, MassGIS.

Table 22. Injury-related Deaths and Nonfatal Hospital Cases by Selected Causes and Intents by Executive Office of Health and Human Services (EOHHS) Regions, MA Residents, 2005

	Total Injuries				Unintentional Motor Vehicle Traffic[3]		Unintentional Falls Among Elders		Unintentional and Undetermined Poisonings[4]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Massachusetts	2,657	770,969	773,626	12,018.5	446	89,015	206	55,082	695	12,883	177	25,679	469	11,312
1) Western Region	395	109,458	109,853	13,184.2	68	13,672	33	7,167	78	2,208	31	3,805	76	1,770
2) Central Region	329	102,533	102,862	12,177.3	61	10,236	23	5,996	73	1,608	12	2,857	66	1,869
3) Northeast Region	538	147,927	148,465	11,593.5	79	16,743	35	11,042	156	2,163	23	4,397	119	2,100
4) Metro West Region	466	143,465	143,931	9,669.0	79	13,885	39	13,529	131	2,128	13	3,451	86	1,869
5) Southeast Region	614	185,011	185,625	14,521.9	129	21,781	59	12,580	165	2,460	30	5,631	88	2,583
6) Boston Region	315	82,575	82,890	11,648.3	30	12,698	17	4,768	92	2,316	68	5,538	34	1,121

1. Crude rates are per 100,000 residents.
2. Age-adjusted rates are per 100,000 residents, and adjusted to the 2000 US Standard Population.
3. Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
4. Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Map 2. Age-adjusted Rate for Injury-related Deaths and Hospital Cases by EOHHS Region of Residence, 2005



	Total Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury			
	Deaths	Nonfatal	Total	Age-adjusted Rate[2]
Massachusetts	2,657	770,969	773,626	12,076.1
1) Western Region	395	109,458	109,853	13,248.6
2) Central Region	329	102,533	102,862	12,254.5
3) Northeast Region	538	147,927	148,465	11,746.7
4) Metro West Region	466	143,465	143,931	9,787.6
5) Southeast Region	614	185,011	185,625	14,811.2
6) Boston Region	315	82,575	82,890	11,495.3

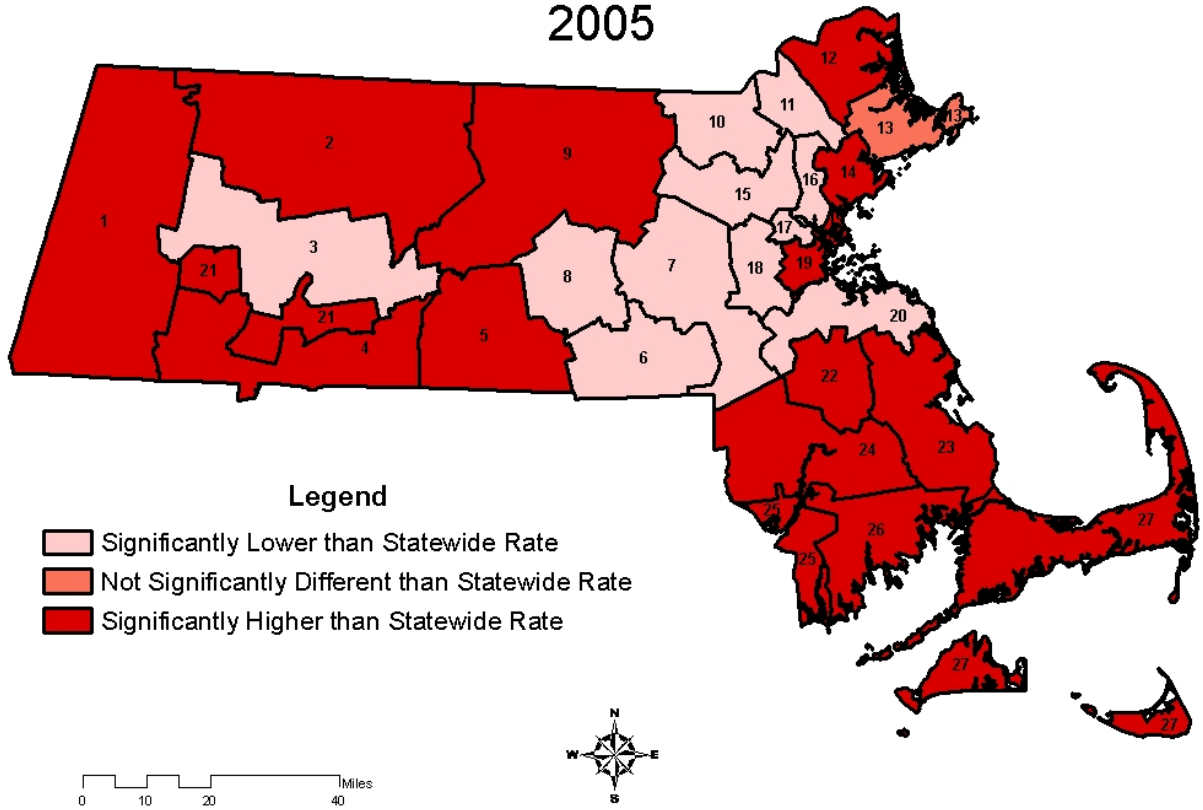
[2] Age-adjusted rates are per 100,000 residents and adjusted to the 2000 US Standard Population.
Sources: Registry of Vital Records and Statistics, MDPH; MA Inpatient Hospital Discharge Database, MA Outpatient Observation Stay Database, MA Outpatient Emergency Department Database, MA Division of Health Care Finance and Policy; Massachusetts Executive Office of Environmental Affairs, MassGIS.

Table 23. Injury-related Deaths and Nonfatal Hospital Cases by Selected Causes and Intents by Community Health Network Area, MA Residents, 2005

	Total Injuries				Unintentional Motor Vehicle Traffic[3]		Unintentional Falls Among Elders		Unintentional and Undetermined Poisonings[4]		Homicide/ Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Massachusetts	2,657	770,969	773,626	12,018.5	446	89,015	206	55,082	695	12,883	177	25,679	469	11,312
Community Health Network of Berkshire (1)	68	21,970	22,038	16,699.9	11	1,770	9	1,651	18	302	3	572	8	324
Upper Valley Health Web (Franklin County) (2)	41	11,721	11,762	13,289.5	6	813	6	585	7	152	1	192	10	150
Partnership for Health in Hampshire County (Northampton) (3)	51	14,726	14,777	9,734.4	9	1,525	4	1,139	2	236	1	354	10	308
The Community Health Connection (Springfield) (4)	152	38,927	39,079	13,048.6	30	6,619	7	2,289	30	1,049	16	1,832	35	583
Community Health Network of Southern Worcester County (5)	42	18,756	18,798	15,777.7	10	1,489	0	857	9	232	2	271	11	251
Community Partners for Health (Milford) (6)	59	17,257	17,316	10,787.4	14	1,460	2	918	10	217	2	312	8	266
Community Health Network of Greater Metro West (Framingham) (7)	105	40,459	40,564	10,684.4	27	3,784	12	3,161	19	468	2	839	17	663
Community Wellness Coalition (Worcester) (8)	110	33,799	33,909	11,166.4	12	4,076	13	2,246	28	650	7	1,355	24	699
Fitchburg/Gardner Community Health Network (9)	118	32,721	32,839	12,564.2	25	3,211	8	1,975	26	509	1	919	23	653
Greater Lowell Community Health Network (10)	103	29,124	29,227	10,710.1	18	3,752	5	1,825	22	294	3	854	30	451
Greater Lawrence Community Health Network (11)	69	19,452	19,521	10,001.7	11	2,315	3	1,286	21	281	2	803	15	332
Greater Haverhill Community Health Network (12)	62	18,249	18,311	12,326.0	14	1,670	4	1,301	12	217	1	456	14	290
Community Health Network North (Beverly/Gloucester) (13)	37	14,022	14,059	11,176.8	5	989	2	1,229	11	210	1	287	9	155
North Shore Community Health Network (14)	147	36,705	36,852	12,824.7	21	4,431	10	2,890	52	649	8	1,133	27	486
Greater Woburn/Concord/Littleton Community Health Network (15)	60	18,025	18,085	8,628.5	8	1,470	6	1,813	15	212	1	332	12	213
North Suburban Health Alliance (Medford/Malden/Melrose) (16)	120	30,385	30,505	11,858.8	10	3,586	11	2,511	38	512	8	864	24	386
Greater Cambridge/Somerville Community Health Network (17)	65	15,386	15,451	5,641.5	7	1,622	5	1,420	23	240	2	432	12	174
West Suburban Health Network (Newton/Waltham) (18)	60	20,836	20,896	8,254.8	7	1,621	5	2,512	15	248	0	374	12	201
Alliance for Community Health (Boston/Chelsea/Revere/Winthrop) (19)	349	89,955	90,304	12,690.2	35	13,484	18	5,352	103	2,474	73	5,820	39	1,218
Blue Hills Community Health Alliance (Greater Quincy) (20)	142	41,376	41,518	11,151.5	25	4,602	10	4,039	48	802	3	1,192	28	521
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield) (21)	83	22,114	22,197	13,748.2	12	2,945	7	1,503	21	469	10	855	13	405
Greater Brockton Community Health Network (22)	110	32,964	33,074	13,644.2	17	5,861	7	1,686	32	466	9	1,137	20	474
South Shore Community Partners in Prevention (Plymouth) (23)	91	24,166	24,257	12,848.9	17	2,454	9	1,553	16	302	2	584	18	274
Greater Attleboro-Taunton Health & Education Response (24)	94	33,042	33,136	13,101.4	22	3,456	11	1,824	27	402	2	945	11	519
Partners for a Healthier Community (Fall River) (25)	73	27,219	27,292	19,222.8	17	2,942	7	1,827	24	337	4	1,035	8	436
Greater New Bedford Health & Human Services Coalition (26)	118	29,072	29,190	14,598.4	26	3,690	8	1,842	41	440	11	970	12	415
Cape Cod & Islands Community Health Network (27)	128	38,548	38,676	15,335.3	30	3,378	17	3,848	25	513	2	960	19	465

[1.] Crude rates are per 100,000 residents.
[2.] Age-adjusted rates are per 100,000 residents, and adjusted to the 2000 US Standard Population.
[3.] Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
[4.] Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Map 3. Age-adjusted Rate of Injury-related Deaths and Hospital Cases by Community Health Network Area of Residence, 2005



	Total Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury			
	Deaths	Nonfatal	Total	Age-adjusted Rate[2]
Community Health Network of Berkshire (1)	68	21,970	22,038	17,297.2
Upper Valley Health Web (Franklin County) (2)	41	11,721	11,762	13,684.4
Partnership for Health in Hampshire County (Northampton) (3)	51	14,726	14,777	10,006.9
The Community Health Connection (Springfield) (4)	152	38,927	39,079	13,163.3
Community Health Network of Southern Worcester County (5)	42	18,756	18,798	16,085.8
Community Partners for Health (Milford) (6)	59	17,257	17,316	11,091.9
Community Health Network of Greater Metro West (Framingham) (7)	105	40,459	40,564	11,186.4
Community Wellness Coalition (Worcester) (8)	110	33,799	33,909	11,100.6
Fitchburg/Gardner Community Health Network (9)	118	32,721	32,839	12,775.2
Greater Lowell Community Health Network (10)	103	29,124	29,227	10,897.2
Greater Lawrence Community Health Network (11)	69	19,452	19,521	9,986.1
Greater Haverhill Community Health Network (12)	62	18,249	18,311	12,675.8
Community Health Network North (Beverly/Gloucester) (13)	37	14,022	14,059	12,034.8
North Shore Community Health Network (14)	147	36,705	36,852	13,076.7
Greater Woburn/Concord/Littleton Community Health Network (15)	60	18,025	18,085	9,114.9
North Suburban Health Alliance (Medford/Malden/Melrose) (16)	120	30,385	30,505	12,004.4
Greater Cambridge/Somerville Community Health Network (17)	65	15,386	15,451	5,719.5
West Suburban Health Network (Newton/Waltham) (18)	60	20,836	20,896	8,259.2
Alliance for Community Health (Boston/Chelsea/Revere/Winthrop) (19)	349	89,955	90,304	12,527.5
Blue Hills Community Health Alliance (Greater Quincy) (20)	142	41,376	41,518	11,445.0
Four (For) Communities (Holyoke, Chicopee, Ludlow, Westfield) (21)	83	22,114	22,197	13,811.6
Greater Brockton Community Health Network (22)	110	32,964	33,074	13,625.4
South Shore Community Partners in Prevention (Plymouth) (23)	91	24,166	24,257	13,248.4
Greater Attleboro-Taunton Health & Education Response (24)	94	33,042	33,136	13,391.7
Partners for a Healthier Community (Fall River) (25)	73	27,219	27,292	19,734.8
Greater New Bedford Health & Human Services Coalition (26)	118	29,072	29,190	14,938.4
Cape Cod & Islands Community Health Network (27)	128	38,548	38,676	16,105.8

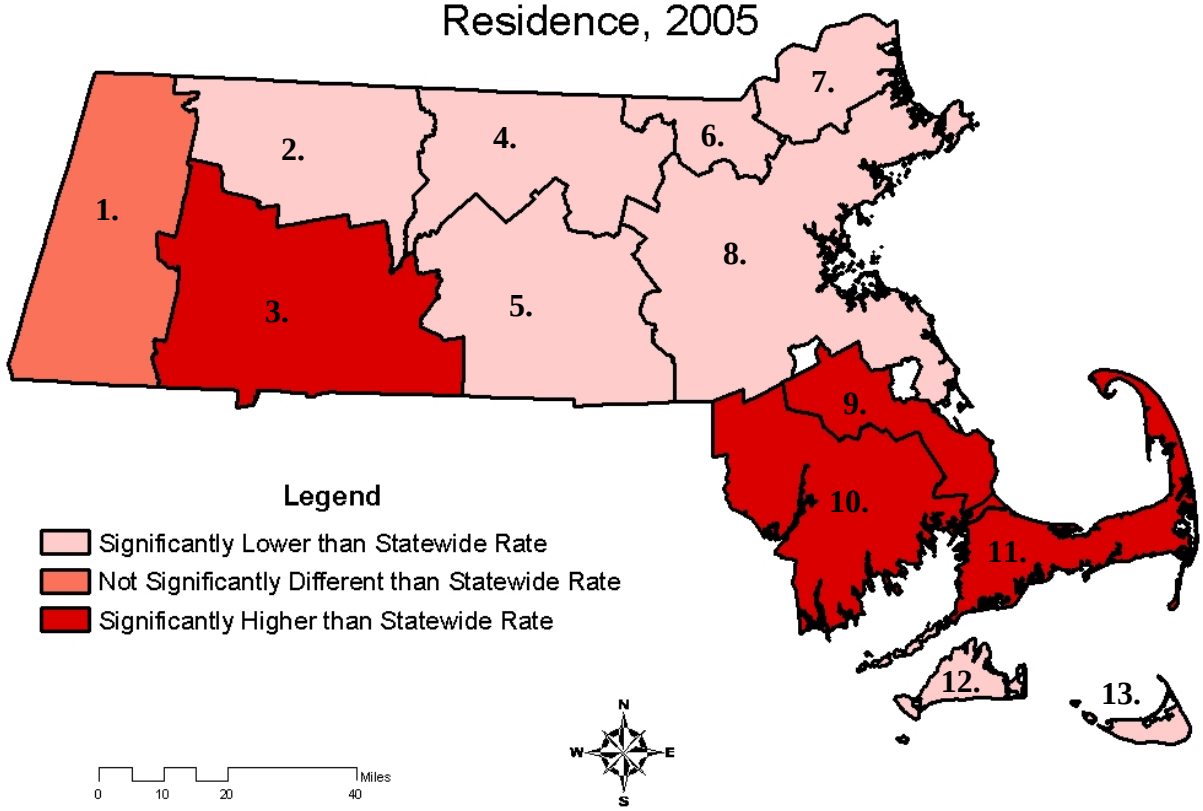
[2] Age-adjusted rates are per 100,000 residents and adjusted to the 2000 US Standard Population.
Sources: Registry of Vital Records and Statistics, MDPH; MA Inpatient Hospital Discharge Database, MA Outpatient Observation Stay Database, MA Outpatient Emergency Department Database, MA Division of Health Care Finance and Policy; Massachusetts Executive Office of Environmental Affairs, MassGIS.

Table 24. Motor Vehicle Traffic-related Deaths and Nonfatal Hospital Cases by Regional Planning Agencies*, MA Residents, 2005

	Total Injuries				Unintentional Motor Vehicle Traffic (MVT)		Unintentional MVT Occupant		Unintentional MVT Motorcyclist		Pedestrian[2]		Pedal Cyclist[3]	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Massachusetts	2,657	770,969	773,626	12,018.5	446	89,040	314	80,317	55	2,930	79	4,722	6	9,090
Berkshire	68	21,970	22,038	16,699.9	11	1,770	7	1,568	2	97	2	72	0	304
Cape Cod	120	33,019	33,139	14,630.6	29	3,147	23	2,847	1	116	4	130	1	459
Central MA	194	64,833	65,027	11,896.1	30	6,551	22	5,904	5	261	3	322	1	711
Franklin	33	9,009	9,042	12,486.4	4	697	4	617	0	40	0	36	0	112
Metro Area	1,168	328,033	329,201	10,793.2	162	37,738	109	33,737	21	1,041	34	2,478	2	3,847
Martha's Vineyard	6	3,259	3,265	20,922.8	1	159	0	133	1	15	0	12	0	48
Merrimack Valley	126	36,953	37,079	11,079.7	25	3,929	20	3,520	1	137	4	222	1	404
Montachusett	111	31,392	31,503	13,290.9	24	2,373	18	2,138	4	126	3	100	0	304
Nantucket	2	2,270	2,272	22,506.2	0	72	0	60	0	4	0	6	0	28
Northern Middlesex	105	30,274	30,379	10,686.4	18	3,825	14	3,436	1	150	3	183	0	364
Old Colony	140	46,294	46,434	13,761.5	22	7,174	17	6,574	1	233	4	270	0	475
Pioneer Valley	287	76,863	77,150	12,429.1	52	11,201	36	10,300	2	303	14	454	1	1,121
Southeast	297	92,129	92,426	15,043.4	68	10,404	44	9,483	16	407	8	437	0	913

* The towns of Pembroke and Stoughton are included as part of both Old Colony and Metro Area Planning groups and are therefore included in counts for both RPAs.
1. Crude rates are per 100,000 residents.
2. Age-adjusted rates are per 100,000 residents, and adjusted to the 2000 US Standard Population.
3. Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
4. Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Map 4. Age-adjusted Rates of Motor Vehicle Traffic-related Injury Deaths and Hospital Cases by Regional Planning Agency of Residence, 2005



	Total Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury			
	Deaths	Nonfatal	Total	Age-adjusted Rate[2]
Massachusetts	2,657	770,969	773,626	1,398.4
Berkshire (1)	68	21,970	22,038	1,411.2
Cape Cod (11)	120	33,019	33,139	1,577.1
Central MA (5)	194	64,833	65,027	1,204.5
Franklin (2)	33	9,009	9,042	983.5
Metro Area (8)	1,168	328,033	329,201	1,241.0
Martha's Vineyard (12)	6	3,259	3,265	1,090.4
Merrimack Valley (7)	126	36,953	37,079	1,227.0
Montachusett (4)	111	31,392	31,503	1,290.1
Nantucket (13)	2	2,270	2,272	701.4
Northern Middlesex (6)	105	30,274	30,379	1,386.8
Old Colony (9)	140	46,294	46,434	1,937.1
Pioneer Valley (3)	287	76,863	77,150	1,782.1
Southeast (10)	297	92,129	92,426	1,764.9

[2] Age-adjusted rates are per 100,000 residents and adjusted to the 2000 US Standard Population.
Sources: Registry of Vital Records and Statistics, MDPH; MA Inpatient Hospital Discharge Database, MA Outpatient Observation Stay Database, MA Outpatient Emergency Department Database, MA Division of Health Care Finance and Policy; Massachusetts Executive Office of Environmental Affairs, MassGIS.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Abington	7	1,887	1,894	11,616.1	2	237	0	108	2	30	0	48	0	19
Acton	7	1,578	1,585	7,717.0	0	146	1	134	1	22	0	21	2	21
Acushnet	3	1,156	1,159	11,001.4	0	157	0	69	0	15	0	21	1	20
Adams	6	1,400	1,406	16,627.2	1	102	1	121	1	27	0	41	0	19
Agawam	19	2,869	2,888	10,116.6	5	336	2	337	3	66	0	61	2	30
Alford	0	81	81	20,317.5	0	<7	0	7	0	<7	0	<7	0	<7
Amesbury	7	1,880	1,887	11,355.8	1	145	0	128	2	20	1	29	3	32
Amherst	2	1,395	1,397	4,024.8	0	184	0	142	0	19	0	40	1	38
Andover	11	2,072	2,083	6,343.3	2	158	0	233	1	28	0	33	3	32
Aquinnah	0	52	52	14,433.7	0	<7	0	<7	0	0	0	<7	0	0
Arlington	12	3,220	3,232	7,830.8	0	259	2	395	4	53	1	56	2	48
Ashburnham	1	728	729	12,211.1	1	89	0	27	0	15	0	10	0	<7
Ashby	1	290	291	9,945.3	0	31	0	15	0	<7	0	<7	0	<7
Ashfield	0	120	120	6,578.9	0	13	0	<7	0	<7	0	<7	0	<7
Ashland	3	1,493	1,496	9,694.8	2	148	0	75	1	19	0	25	0	19
Athol	8	2,037	2,045	17,497.4	2	79	1	42	2	8	0	11	0	17
Attleboro	14	5,686	5,700	13,144.5	4	496	3	404	4	70	0	153	2	90
Auburn	6	1,522	1,528	9,321.1	2	165	2	165	0	21	0	42	1	22
Avon	1	543	544	12,520.1	1	77	0	41	0	8	0	17	0	<7
Ayer	6	1,027	1,033	14,323.3	1	98	0	59	3	21	1	9	0	23
Barnstable	27	8,263	8,290	17,306.2	9	852	3	618	5	140	0	302	4	131
Barre	1	517	518	9,637.2	0	67	0	25	0	10	0	14	1	14
Becket	1	201	202	11,351.7	0	20	1	<7	0	<7	0	8	0	<7
Bedford	3	1,299	1,302	10,427.7	0	79	0	135	0	16	0	22	0	12
Belchertown	6	1,406	1,412	10,160.5	2	145	0	61	2	21	0	25	1	20
Bellingham	3	1,681	1,684	10,702.3	1	177	0	70	1	20	0	26	0	18
Belmont	9	1,694	1,703	7,261.3	3	141	1	221	3	19	0	28	1	12
Berkley	3	823	826	13,003.8	1	95	1	21	0	11	0	28	0	9
Berlin	0	277	277	10,324.3	0	30	0	18	0	0	0	<7	0	<7
Bernardston	0	303	303	13,544.9	0	25	0	18	0	<7	0	0	0	7
Beverly	11	5,111	5,122	12,858.7	2	403	0	466	3	81	0	115	5	56
Billerica	15	3,921	3,936	9,886.5	4	411	0	190	4	35	0	96	3	48
Blackstone	4	797	801	8,849.9	0	68	0	26	2	16	0	16	1	11
Blandford	1	173	174	13,744.1	0	21	0	7	0	<7	0	<7	0	<7
Bolton	3	378	381	8,604.3	1	28	0	16	0	<7	0	<7	2	<7
Boston	243	67,733	67,976	12,172.5	23	10,804	13	3,394	70	1,997	64	4,913	23	891

1. Crude rates are per 100,000 residents.
2. Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
3. Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005, *(continued)*

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Bourne	10	3,187	3,197	16,517.7	5	318	2	252	3	36	0	70	0	28
Boxborough	0	328	328	6,518.3	0	38	0	7	0	<7	0	<7	0	<7
Boxford	3	643	646	7,914.7	0	40	1	30	0	7	0	<7	0	7
Boylston	1	351	352	8,276.5	0	24	0	28	1	<7	0	7	0	0
Braintree	13	3,639	3,652	10,850.3	2	384	4	399	2	53	0	96	5	36
Brewster	3	906	909	8,875.2	0	61	1	139	1	13	0	15	0	17
Bridgewater	9	2,370	2,379	9,232.0	3	260	1	92	2	32	0	85	2	49
Brimfield	0	515	515	14,199.1	0	43	0	22	0	8	0	10	0	<7
Brockton	57	17,184	17,241	17,178.1	7	3,935	3	726	18	239	8	743	9	246
Brookfield	0	448	448	14,470.3	0	51	0	30	0	13	0	<7	0	7
Brookline	11	3,740	3,751	6,648.9	1	260	0	467	1	40	0	68	2	59
Buckland	2	19	21	1,052.6	0	<7	0	<7	0	0	0	0	2	<7
Burlington	8	2,047	2,055	8,833.0	1	194	0	164	4	24	0	33	0	20
Cambridge	34	7,382	7,416	7,304.3	5	786	1	584	11	158	5	282	5	97
Canton	6	2,480	2,486	11,573.0	3	237	0	258	0	55	0	55	1	28
Carlisle	0	371	371	7,692.3	0	22	0	19	0	<7	0	<7	0	<7
Carver	6	1,880	1,886	16,326.2	0	230	0	106	1	26	1	41	1	22
Charlemont	2	154	156	11,250.9	0	19	0	<7	0	<7	0	<7	0	<7
Charlton	2	1,512	1,514	12,163.6	0	144	0	47	0	21	0	11	2	22
Chatham	5	561	566	8,283.3	0	44	2	102	0	14	0	11	2	<7
Chelmsford	5	2,698	2,703	8,014.1	1	229	0	327	0	21	0	43	3	36
Chelsea	15	3,452	3,467	10,158.8	3	564	0	276	8	79	1	238	1	69
Cheshire	1	440	441	13,140.6	0	46	0	18	0	0	0	7	0	<7
Chester	0	190	190	14,393.9	0	26	0	7	0	<7	0	<7	0	<7
Chesterfield	1	88	89	7,002.4	0	7	0	<7	0	0	0	<7	0	0
Chicopee	26	6,816	6,842	12,531.4	2	894	0	476	11	182	4	261	4	168
Chilmark	0	163	163	17,240.5	0	10	0	13	0	<7	0	<7	0	0
Clarksburg	0	400	400	24,064.9	0	31	0	24	0	<7	0	13	0	10
Clinton	7	2,357	2,364	16,889.3	1	224	1	157	1	41	0	62	2	37
Cohasset	2	631	633	8,768.5	0	60	0	103	0	<7	0	<7	1	<7
Colrain	1	239	240	12,917.1	0	20	0	12	0	7	0	<7	0	<7
Concord	2	1,592	1,594	9,455.5	0	76	0	248	0	11	0	26	1	35
Conway	1	167	168	8,832.8	0	9	0	<7	0	<7	0	<7	1	<7
Cummington	1	104	105	10,649.1	0	17	0	<7	0	<7	0	<7	0	<7
Dalton	3	946	949	14,170.5	1	75	0	90	0	13	0	14	1	<7
Danvers	7	2,968	2,975	11,442.7	0	230	0	380	2	62	0	62	1	22

1. Crude rates are per 100,000 residents.
2. Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
3. Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005 *(continued)*

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Dartmouth	18	3,102	3,120	9,945.5	8	416	0	280	6	32	1	88	1	35
Dedham	10	2,563	2,573	10,865.3	0	281	0	267	3	30	0	67	0	21
Deerfield	0	579	579	12,097.8	0	36	0	55	0	11	0	<7	0	8
Dennis	7	2,281	2,288	14,377.3	0	210	2	323	1	30	1	72	1	28
Dighton	0	911	911	13,703.4	0	71	0	64	0	8	0	20	0	11
Douglas	6	930	936	11,906.9	2	64	0	20	2	12	1	13	0	15
Dover	0	478	478	8,484.2	0	25	0	31	0	<7	0	<7	0	<7
Dracut	11	3,117	3,128	10,859.2	3	424	0	192	4	34	0	71	2	49
Dudley	4	1,719	1,723	15,972.9	1	83	0	50	2	11	0	11	1	24
Dunstable	2	209	211	6,715.5	0	12	0	8	0	<7	0	<7	2	<7
Duxbury	5	1,433	1,438	9,812.4	1	105	0	149	0	17	0	20	1	19
East Bridgewater	4	1,562	1,566	11,321.6	0	170	0	88	1	31	0	29	3	31
East Brookfield	1	253	254	12,032.2	0	27	0	10	0	<7	0	<7	1	<7
East Longmeadow	9	1,011	1,020	6,871.0	1	131	0	165	2	24	0	17	2	12
Eastham	4	437	441	7,945.9	1	52	0	58	0	<7	0	<7	3	9
Easthampton	8	2,000	2,008	12,555.8	2	226	2	127	0	35	0	57	2	35
Easton	7	2,092	2,099	9,128.1	0	239	2	145	3	25	0	54	1	29
Edgartown	2	938	940	23,894.3	0	44	0	89	2	20	0	16	0	8
Egremont	0	135	135	9,937.3	0	10	0	11	0	0	0	<7	0	0
Erving	0	219	219	14,202.3	0	20	0	13	0	<7	0	<7	0	<7
Essex	0	344	344	10,293.2	0	11	0	30	0	<7	0	<7	0	<7
Everett	18	6,065	6,083	16,396.2	1	869	3	349	6	108	2	202	1	68
Fairhaven	12	1,917	1,929	11,890.5	6	229	2	225	1	23	0	32	0	28
Fall River	58	20,808	20,866	22,651.6	12	2,282	5	1,241	21	264	3	902	8	371
Falmouth	14	6,587	6,601	19,634.1	4	512	1	701	0	52	1	132	1	56
Fitchburg	18	5,478	5,496	13,565.7	2	666	1	380	8	103	0	245	2	160
Florida	0	183	183	27,439.9	0	15	0	10	0	<7	0	<7	0	<7
Foxborough	2	1,814	1,816	11,149.3	0	207	1	121	0	26	0	28	1	30
Framingham	21	8,323	8,344	12,709.6	3	998	1	648	5	103	0	254	4	164
Franklin	9	2,816	2,825	9,187.6	0	206	1	149	1	18	0	49	0	48
Freetown	5	1,114	1,119	12,484.7	1	130	2	36	0	12	0	18	2	18
Gardner	12	3,352	3,364	16,053.4	3	274	1	219	1	47	0	150	1	70
Georgetown	4	793	797	9,933.9	1	60	0	44	0	<7	0	10	1	<7
Gill	1	233	234	16,792.4	0	17	0	15	0	<7	0	<7	1	<7
Gloucester	14	4,362	4,376	14,267.5	2	304	0	335	7	77	0	121	2	51
Goshen	0	52	52	5,439.3	0	<7	0	<7	0	0	0	0	0	0

[1] Crude rates are per 100,000 residents.
[2] Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
[3] Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005 *(continued)*

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Gosnold	0	<7	<7	--	0	0	0	0	0	0	0	0	0	0
Grafton	5	1,522	1,527	9,098.5	1	124	0	65	1	27	0	30	1	20
Granby	3	559	562	8,875.6	1	84	0	37	0	13	0	17	1	<7
Granville	0	160	160	9,754.9	0	21	0	8	0	<7	0	<7	0	<7
Great Barrington	6	1,237	1,243	16,703.8	1	87	0	110	4	19	0	21	0	20
Greenfield	14	2,720	2,734	15,283.5	2	250	5	181	1	60	0	89	4	39
Groton	5	1,062	1,067	10,263.6	0	81	1	41	0	16	0	10	2	13
Groveland	2	689	691	10,484.0	0	65	1	54	0	<7	0	12	1	7
Hadley	4	487	491	10,186.7	2	50	0	67	0	8	0	<7	1	<7
Halifax	4	891	895	11,467.0	1	98	2	49	0	19	0	13	1	9
Hamilton	2	732	734	8,807.3	0	38	0	53	0	8	1	<7	0	<7
Hampden	0	343	343	6,457.1	0	51	0	34	0	8	0	<7	0	<7
Hancock	0	75	75	7,320.2	0	<7	0	<7	0	0	0	<7	0	<7
Hanover	1	1,229	1,230	8,737.7	0	106	0	80	0	14	0	35	0	12
Hanson	3	1,178	1,181	11,911.2	0	143	1	42	1	19	0	26	0	13
Hardwick	2	385	387	14,576.3	1	28	0	23	0	<7	0	10	0	<7
Harvard	0	514	514	8,404.2	0	29	0	27	0	<7	0	<7	0	7
Harwich	7	1,386	1,393	10,991.9	0	162	2	204	2	14	0	38	1	24
Hatfield	2	355	357	10,884.1	0	42	1	21	0	<7	0	<7	0	0
Haverhill	24	8,640	8,664	14,432.3	4	969	2	621	6	109	0	321	4	165
Hawley	0	41	41	11,869.6	0	<7	0	<7	0	0	0	<7	0	0
Heath	0	44	44	5,465.8	0	<7	0	<7	0	0	0	<7	0	0
Hingham	2	1,767	1,769	8,239.4	1	119	0	246	0	28	0	41	0	23
Hinsdale	0	302	302	16,701.3	0	36	0	13	0	<7	0	9	0	<7
Holbrook	7	1,353	1,360	12,633.5	1	175	0	82	3	22	0	38	2	20
Holden	6	1,344	1,350	8,146.8	0	130	2	102	0	22	1	26	2	21
Holland	1	337	338	13,365.0	1	44	0	12	0	<7	0	9	0	9
Holliston	2	1,296	1,298	9,385.4	0	105	0	92	1	14	0	24	0	13
Holyoke	25	6,737	6,762	16,457.0	5	1,147	2	400	5	145	3	306	4	132
Hopedale	3	759	762	12,223.3	1	63	0	82	0	9	0	<7	0	13
Hopkinton	4	1,248	1,252	8,912.3	0	98	0	76	2	12	0	17	1	11
Hubbardston	2	465	467	10,760.4	2	46	0	11	0	<7	0	7	0	8
Hudson	6	2,182	2,188	11,609.3	1	199	2	138	0	24	0	46	0	25
Hull	4	1,272	1,276	11,313.1	1	140	0	71	1	20	0	33	0	20
Huntington	0	331	331	15,183.5	0	37	0	15	0	<7	0	11	0	<7
Ipswich	5	1,228	1,233	9,281.1	0	89	1	125	1	10	0	7	1	18

1. Crude rates are per 100,000 residents.
2. Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
3. Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005, *(continued)*

(continued)

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Kingston	2	1,625	1,627	13,084.0	0	139	0	155	0	14	1	40	0	16
Lakeville	2	1,027	1,029	9,691.1	1	125	0	54	0	9	0	25	0	<7
Lancaster	1	897	898	12,703.4	0	75	0	68	0	17	0	17	0	14
Lanesborough	1	331	332	11,233.5	0	22	0	15	0	<7	0	<7	0	<7
Lawrence	29	9,201	9,230	11,312.5	2	1,295	1	394	12	144	2	541	5	187
Lee	1	742	743	12,631.8	1	57	0	71	0	<7	0	15	0	<7
Leicester	4	1,090	1,094	9,988.1	0	120	0	56	1	19	0	30	2	21
Lenox	3	735	738	14,332.9	1	41	0	152	1	11	0	9	0	15
Leominster	21	5,488	5,509	13,079.3	6	601	2	433	4	73	0	164	4	108
Leverett	0	114	114	6,444.3	0	10	0	<7	0	<7	0	<7	0	<7
Lexington	7	1,937	1,944	6,383.8	0	125	2	275	2	28	0	21	2	12
Leyden	0	111	111	13,629.4	0	10	0	7	0	<7	0	<7	0	<7
Lincoln	0	484	484	6,099.6	0	28	0	51	0	<7	0	<7	0	<7
Littleton	1	798	799	9,333.0	0	58	0	78	0	<7	0	15	1	15
Longmeadow	7	956	963	6,190.5	2	104	1	145	2	23	0	21	1	9
Lowell	48	14,109	14,157	13,387.4	7	2,154	3	752	11	153	2	543	13	231
Ludlow	12	2,178	2,190	10,029.8	2	258	2	176	1	54	1	106	2	37
Lunenburg	7	1,054	1,061	10,601.5	1	93	0	61	2	15	0	29	3	29
Lynn	53	13,554	13,607	14,760.4	7	2,116	2	678	27	277	4	608	5	242
Lynnfield	10	1,118	1,128	9,774.7	1	85	1	109	3	12	0	18	4	8
Malden	28	6,972	7,000	12,339.2	3	1,033	2	446	5	126	3	270	8	112
Manchester	1	437	438	8,214.6	0	24	0	39	0	<7	0	11	0	<7
Mansfield	6	2,195	2,201	9,597.5	1	184	0	115	1	29	0	61	2	33
Marblehead	5	1,682	1,687	8,316.5	3	125	2	157	0	29	0	22	0	16
Marion	2	597	599	11,267.9	0	47	0	59	1	<7	0	10	0	<7
Marlborough	17	4,899	4,916	13,228.2	5	543	4	430	2	49	1	113	2	82
Marshfield	10	2,582	2,592	10,418.4	3	252	0	154	1	31	0	58	5	38
Mashpee	12	2,115	2,127	15,022.2	3	209	0	164	3	21	0	46	0	15
Mattapoisett	3	623	626	9,665.0	1	72	1	56	0	8	0	<7	1	<7
Maynard	1	1,086	1,087	10,635.0	0	73	0	85	0	18	0	17	1	11
Medfield	1	1,045	1,046	8,484.8	0	81	0	58	1	7	0	11	0	8
Medford	27	6,494	6,521	12,120.6	3	741	1	639	10	112	0	198	4	68
Medway	6	1,229	1,235	9,663.5	1	96	1	62	1	12	0	16	3	9
Melrose	14	2,931	2,945	11,169.7	1	237	4	301	4	37	0	57	2	41
Mendon	0	602	602	10,482.3	0	47	0	31	0	<7	0	17	0	7
Merrimac	1	752	753	11,858.3	0	54	0	40	0	12	0	8	1	19

1. Crude rates are per 100,000 residents.
2. Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
3. Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005 *(continued)*

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Methuen	13	5,471	5,484	12,314.7	3	650	0	402	5	67	0	158	3	63
Middleborough	13	3,181	3,194	15,099.5	2	372	0	175	7	36	0	82	1	49
Middlefield	0	31	31	5,646.6	0	<7	0	<7	0	<7	0	0	0	0
Middleton	5	738	743	8,185.5	0	56	0	34	1	12	0	26	3	12
Milford	15	3,548	3,563	12,945.5	6	350	0	225	3	52	1	87	2	53
Millbury	2	1,305	1,307	9,722.5	0	132	0	102	2	19	0	32	0	32
Millis	0	803	803	10,101.9	0	66	0	53	0	<7	0	17	0	10
Millville	1	332	333	11,334.2	0	17	0	7	0	<7	0	9	0	9
Milton	5	2,794	2,799	10,665.7	0	278	0	325	4	43	0	74	1	25
Monroe	0	21	21	21,000.0	0	<7	0	<7	0	0	0	0	0	0
Monson	2	996	998	11,413.5	0	96	0	45	1	19	0	18	0	9
Montague	4	1,082	1,086	12,907.0	0	84	0	67	3	20	1	24	0	16
Monterey	0	95	95	9,906.2	0	7	0	<7	0	<7	0	0	0	<7
Montgomery	0	114	114	15,354.0	0	11	0	8	0	<7	0	<7	0	<7
Mount Washington	0	16	16	12,111.1	0	<7	0	<7	0	<7	0	0	0	<7
Nahant	2	317	319	8,883.3	0	29	1	27	0	9	0	12	0	<7
Nantucket	2	2,270	2,272	22,506.2	0	72	0	120	1	18	0	37	1	8
Natick	7	3,439	3,446	10,804.2	3	269	0	338	0	41	0	56	3	32
Needham	10	2,724	2,734	9,611.5	2	146	1	386	0	34	0	28	4	33
New Ashford	0	29	29	11,732.8	0	<7	0	<7	0	0	0	0	0	0
New Bedford	68	15,621	15,689	16,601.8	8	2,106	2	844	32	300	10	695	5	255
New Braintree	1	110	111	10,183.5	0	17	0	<7	1	<7	0	<7	0	0
New Marlborough	1	202	203	13,356.1	0	14	0	15	0	<7	0	<7	0	<7
New Salem	1	100	101	10,243.4	0	<7	0	<7	0	<7	0	<7	0	0
Newbury	2	675	677	9,685.3	0	51	0	37	0	<7	0	7	2	10
Newburyport	11	1,862	1,873	10,767.5	4	119	0	232	2	24	0	26	1	20
Newton	15	6,526	6,541	7,848.0	2	442	2	884	0	58	0	102	2	54
Norfolk	2	885	887	8,442.8	2	67	0	22	0	14	0	21	0	11
North Adams	12	2,768	2,780	19,813.6	2	217	0	163	5	43	1	88	1	68
North Andover	11	1,970	1,981	7,300.0	4	156	2	223	2	30	0	45	1	38
North Attleboro	5	3,083	3,088	10,997.9	1	279	1	174	0	27	0	53	0	52
North Brookfield	2	518	520	10,806.3	0	68	0	40	0	<7	0	14	1	10
North Reading	5	927	932	6,690.6	0	94	0	76	2	25	0	9	2	12
Northampton	8	3,171	3,179	11,037.0	0	298	1	304	0	68	0	86	1	114
Northborough	3	1,208	1,211	8,265.1	0	96	1	97	1	12	0	14	0	34
Northbridge	5	1,658	1,663	11,724.5	2	115	0	99	0	27	0	29	0	42

1. Crude rates are per 100,000 residents.
2. Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
3. Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005 *(continued)*

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Northfield	1	386	387	11,996.3	1	23	0	28	0	<7	0	5	0	<7
Norton	6	2,113	2,119	11,090.8	1	215	0	114	2	31	0	49	0	27
Norwell	6	842	848	8,168.0	2	73	1	84	2	13	0	10	1	9
Norwood	10	3,905	3,915	13,750.4	1	444	0	417	4	74	0	82	3	60
Oak Bluffs	3	588	591	15,577.2	1	35	1	61	0	8	0	9	0	<7
Oakham	0	197	197	10,412.3	0	28	0	<7	0	<7	0	<7	0	<7
Orange	3	1,255	1,258	16,429.3	0	46	0	30	1	10	0	12	1	16
Orleans	4	548	552	8,546.2	0	51	1	108	1	9	0	10	1	12
Otis	1	180	181	13,012.2	1	12	0	<7	0	<7	0	0	0	<7
Oxford	2	1,826	1,828	13,333.3	2	138	0	61	0	12	0	26	0	21
Palmer	4	2,340	2,344	18,177.6	0	246	1	140	0	46	0	61	2	33
Paxton	2	386	388	8,516.2	1	43	0	32	1	<7	0	11	0	<7
Peabody	23	6,549	6,572	12,897.9	2	673	3	661	4	88	0	139	6	66
Pelham	2	99	101	7,106.7	1	13	0	10	0	<7	0	<7	0	<7
Pembroke	13	1,933	1,946	10,769.8	4	164	3	96	2	24	0	45	0	16
Pepperell	2	1,150	1,152	10,117.7	0	73	0	54	1	24	0	19	1	24
Peru	2	124	126	15,016.7	0	15	1	<7	0	<7	0	<7	1	<7
Petersham	0	130	130	10,140.4	0	<7	0	<7	0	<7	0	<7	0	<7
Phillipston	0	312	312	17,775.8	0	12	0	<7	0	<7	0	<7	0	<7
Pittsfield	24	9,223	9,247	21,040.3	3	801	5	591	7	132	2	291	2	128
Plainfield	0	47	47	7,833.3	0	<7	0	0	0	0	0	0	0	0
Plainville	6	916	922	11,533.7	3	86	0	62	2	<7	0	25	0	18
Plymouth	35	8,661	8,696	15,874.1	5	901	1	560	7	96	0	215	8	91
Plympton	1	395	396	14,260.0	1	43	0	18	0	17	0	21	0	<7
Princeton	0	313	313	8,892.0	0	22	0	10	0	<7	0	<7	0	7
Provincetown	2	247	249	7,230.0	0	27	0	29	1	8	0	<7	1	13
Quincy	41	10,478	10,519	11,628.6	2	1,056	2	1,115	17	278	1	431	9	135
Randolph	14	3,638	3,652	11,219.0	6	741	1	248	3	46	1	133	0	37
Raynham	9	1,719	1,728	12,868.6	2	200	2	112	1	28	0	41	1	21
Reading	6	1,916	1,922	8,298.4	0	158	1	190	3	36	0	24	1	14
Rehoboth	4	805	809	7,204.6	1	68	1	47	1	<7	0	24	0	8
Revere	35	6,051	6,086	13,360.8	3	907	4	465	10	143	3	262	6	79
Richmond	2	138	140	8,652.7	0	11	0	7	0	<7	0	<7	1	<7
Rochester	2	602	604	11,407.0	1	63	0	24	0	8	0	14	1	<7
Rockland	11	2,359	2,370	13,283.3	2	273	2	144	4	25	0	70	2	33
Rockport	2	852	854	11,003.7	0	59	1	103	0	12	0	11	0	10

[1] Crude rates are per 100,000 residents.
[2] Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
[3] Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005 *(continued)*

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Rowe	0	48	48	13,714.3	0	<7	0	<7	0	<7	0	0	0	0
Rowley	3	645	648	11,111.1	2	39	0	32	1	10	0	8	0	13
Royalston	0	233	233	17,052.7	0	17	0	11	0	0	0	1	0	<7
Russell	0	251	251	14,567.6	0	29	0	8	0	<7	0	<7	0	<7
Rutland	6	714	720	9,721.8	1	56	0	26	1	13	0	14	2	14
Salem	27	5,562	5,589	13,419.9	5	671	0	388	9	95	3	157	4	77
Salisbury	4	1,254	1,258	15,222.7	2	106	0	63	1	18	0	30	0	12
Sandisfield	1	81	82	9,879.5	0	9	0	<7	0	<7	0	<7	0	0
Sandwich	11	2,052	2,063	9,962.8	3	203	1	162	2	20	0	54	1	37
Saugus	17	3,634	3,651	13,589.2	3	394	1	321	5	57	0	80	7	38
Savoy	0	88	88	12,154.7	0	<7	0	<7	0	0	0	<7	0	0
Scituate	3	1,537	1,540	8,499.4	0	150	0	149	1	36	0	27	1	26
Seekonk	10	501	511	3,740.8	3	36	2	24	1	<7	0	6	3	7
Sharon	3	1,456	1,459	8,448.7	1	176	1	121	0	17	0	21	1	9
Sheffield	1	446	447	13,303.6	0	39	0	23	0	7	0	7	1	8
Shelburne	1	383	384	18,695.2	0	26	0	37	0	<7	0	<7	0	<7
Sherborn	0	406	406	9,620.9	0	30	0	21	0	7	0	<7	0	<7
Shirley	4	780	784	10,650.7	0	84	1	32	1	15	0	16	1	7
Shrewsbury	6	2,800	2,806	8,459.2	0	236	1	237	3	42	0	37	1	36
Shutesbury	0	125	125	6,782.4	0	20	0	<7	0	<7	0	<7	0	10
Somerset	2	2,486	2,488	13,402.3	0	244	0	276	1	36	0	43	0	19
Somerville	30	7,807	7,837	10,397.8	3	926	2	493	12	144	1	294	5	84
South Hadley	4	1,543	1,547	9,062.2	0	145	0	166	0	26	0	33	0	29
Southampton	3	622	625	10,724.1	0	55	0	38	0	<7	0	10	3	8
Southborough	2	685	687	7,223.2	2	54	0	40	0	7	0	7	0	18
Southbridge	7	3,377	3,384	19,333.8	1	330	0	173	3	69	0	81	1	51
Southwick	5	1,173	1,178	12,384.4	3	109	0	78	0	17	0	26	1	7
Spencer	9	1,395	1,404	11,615.8	2	169	0	56	1	31	0	34	3	17
Springfield	79	24,258	24,337	15,564.9	14	4,874	2	958	14	734	15	1,484	19	402
Sterling	3	837	840	10,823.3	0	41	0	57	1	15	0	9	0	15
Stockbridge	0	206	206	9,131.2	0	23	0	17	0	<7	0	<7	0	<7
Stoneham	8	2,446	2,454	11,364.3	0	214	0	263	3	34	0	45	2	31
Stoughton	8	3,396	3,404	12,710.0	1	496	1	221	1	50	0	62	2	43
Stow	3	540	543	8,816.4	2	42	0	39	0	<7	0	9	0	8
Sturbridge	1	1,102	1,103	12,498.6	1	114	0	68	0	13	0	10	0	23
Sudbury	6	1,548	1,554	9,122.4	1	87	1	139	0	18	1	10	1	12

[1] Crude rates are per 100,000 residents.
[2] Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
[3] Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005 *(continued)*

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
Sunderland	1	261	262	6,799.9	1	30	0	16	0	<7	0	<7	0	0
Sutton	4	750	754	8,402.1	0	61	0	30	0	15	0	9	2	14
Swampscott	3	1,321	1,324	9,269.8	0	108	0	169	2	20	1	35	0	14
Swansea	5	1,993	1,998	12,300.7	1	187	0	175	1	15	1	44	0	26
Taunton	22	10,998	11,020	19,557.0	5	1,315	1	520	10	143	2	403	2	208
Templeton	5	1,017	1,022	13,674.1	3	84	0	61	1	9	0	18	0	24
Tewksbury	11	2,552	2,563	8,841.0	2	301	0	205	1	29	0	56	5	40
Tisbury	0	1,235	1,235	32,338.3	0	57	0	85	0	17	0	22	0	21
Tolland	0	43	43	9,558.3	0	<7	0	<7	0	<7	0	0	0	<7
Topsfield	0	610	610	9,873.7	0	41	0	52	0	9	0	9	0	8
Townsend	1	937	938	10,115.4	1	109	0	42	0	9	0	20	0	11
Truro	1	144	145	6,706.8	0	18	0	16	0	8	0	<7	0	0
Tyngsborough	6	915	921	8,152.6	0	106	1	51	2	8	1	18	0	21
Tyringham	0	26	26	7,386.4	0	<7	0	4	0	0	0	0	0	0
Upton	1	705	706	11,076.2	0	54	0	41	0	<7	0	14	0	11
Uxbridge	2	1,450	1,452	11,731.4	1	143	0	77	0	21	0	21	0	16
Wakefield	14	2,634	2,648	10,784.8	2	240	0	247	5	34	3	59	4	40
Wales	0	244	244	13,421.3	0	25	0	17	0	8	0	7	0	<7
Walpole	8	2,623	2,631	11,405.9	1	248	1	224	3	36	0	61	2	49
Waltham	17	4,222	4,239	7,116.7	2	480	1	441	10	72	0	126	3	55
Ware	4	2,093	2,097	20,995.2	1	179	0	106	0	27	1	57	0	39
Wareham	5	4,340	4,345	20,424.0	1	470	1	249	1	39	0	88	1	45
Warren	5	806	811	16,091.3	1	78	0	37	1	13	0	17	2	16
Warwick	0	65	65	8,477.1	0	<7	0	<7	0	<7	0	<7	0	0
Washington	1	64	65	11,831.5	0	<7	0	<7	0	0	0	<7	1	0
Watertown	14	2,665	2,679	8,305.7	1	296	0	311	4	24	0	54	4	30
Wayland	4	1,148	1,152	8,851.3	1	64	0	129	0	10	0	7	1	8
Webster	8	4,166	4,174	24,767.1	1	126	0	186	2	18	2	24	0	33
Wellesley	1	1,975	1,976	7,325.3	0	86	0	194	0	28	0	27	1	14
Wellfleet	0	252	252	8,933.0	0	31	0	39	0	<7	0	10	0	<7
Wendell	0	108	108	10,434.8	0	9	0	<7	0	<7	0	<7	0	0
Wenham	2	346	348	7,495.2	1	20	0	26	0	<7	0	7	1	<7
West Boylston	5	719	724	9,392.8	0	53	2	47	0	<7	0	31	2	25
West Bridgewater	3	807	810	11,878.6	2	97	0	108	0	<7	0	13	0	10
West Brookfield	0	538	538	13,809.0	0	49	0	48	0	8	0	7	0	11
West Newbury	1	406	407	9,462.9	0	22	0	20	0	<7	0	<7	1	<7

[1] Crude rates are per 100,000 residents.
[2] Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
[3] Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Table 25. Injury-related Deaths and Nonfatal Hospital Cases by Selected Injury Causes and Intents by City/Town, MA Residents, 2005 *(continued)*

COMMUNITY	Total Injury Deaths and Nonfatal Injury-related Cases				Unintentional Motor Vehicle Traffic[2]		Unintentional Falls Among Persons 65 Years and Older		Unintentional and Undetermined Poisonings[3]		Homicide/Assault		Suicide/Self-Inflicted	
	Deaths	Nonfatal	Total	Crude Rate[1]	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal	Deaths	Nonfatal
West Springfield	20	3,251	3,271	11,708.1	5	461	0	229	6	81	1	110	7	56
West Stockbridge	0	145	145	9,978.6	0	9	0	8	0	<7	0	<7	0	0
West Tisbury	1	280	281	10,540.1	0	10	0	10	0	<7	0	<7	1	<7
Westborough	4	1,670	1,674	8,913.3	1	123	0	163	1	22	0	57	1	72
Westfield	20	5,748	5,768	14,265.7	3	572	3	421	4	83	2	162	3	62
Westford	5	1,603	1,608	7,524.9	1	115	1	100	0	12	0	24	2	25
Westhampton	1	198	199	12,696.0	0	22	0	13	0	<7	0	<7	0	<7
Westminster	4	813	817	11,103.6	0	78	0	44	0	10	0	8	1	9
Weston	4	930	934	8,058.0	0	52	1	129	0	8	0	<7	2	<7
Westport	8	1,932	1,940	12,887.8	4	229	2	135	1	22	0	46	0	20
Westwood	3	1,419	1,422	10,228.7	1	109	0	180	2	14	0	15	0	20
Weymouth	33	6,937	6,970	12,977.6	6	744	1	503	14	133	1	183	5	109
Whately	1	112	113	7,133.8	0	10	0	8	0	<7	0	<7	1	0
Whitman	7	1,770	1,777	12,319.7	0	175	0	75	2	25	1	48	1	26
Wilbraham	6	1,103	1,109	7,944.1	0	135	1	133	2	18	0	22	1	14
Williamsburg	2	358	360	14,796.5	0	39	0	23	0	<7	0	7	0	<7
Williamstown	1	838	839	10,137.7	0	36	1	143	0	11	0	13	0	16
Wilmington	5	1,536	1,541	7,190.5	1	119	1	131	1	31	0	29	2	11
Winchendon	5	1,584	1,589	15,756.1	1	159	1	62	1	21	0	52	1	30
Winchester	9	1,849	1,858	8,789.4	2	131	0	219	1	15	0	28	2	14
Windsor	0	94	94	10,955.7	0	11	0	<7	0	0	0	<7	0	0
Winthrop	11	1,599	1,610	9,433.4	0	163	0	166	3	57	0	57	2	24
Woburn	18	4,206	4,224	11,393.4	4	454	2	352	6	53	1	126	2	63
Worcester	73	22,760	22,833	12,696.4	8	3,049	6	1,412	19	489	6	1,109	15	518
Worthington	0	118	118	9,140.2	0	10	0	8	0	<7	0	0	0	<7
Wrentham	3	1,202	1,205	10,889.2	0	100	1	111	0	14	0	16	0	26
Yarmouth	13	4,053	4,066	16,486.2	4	397	1	551	3	69	0	96	2	43

[1] Crude rates are per 100,000 residents.
[2] Motor vehicle traffic-related injuries include: motor vehicle occupants (i.e., drivers and passengers of cars and light trucks), pedestrians and pedal cyclists injured by a motor vehicle, and motorcyclists.
[3] Poisonings can include prescription medicines, household cleaners, carbon monoxide poisoning, toxic effects of legal or illegal drugs, etc.

Executive Office of Health and Human Services Regions

Western Region
ADAMS
AGAWAM
ALFORD
AMHERST
ASHFIELD
ATHOL
BECKET
BELCHERTOWN
BERNARDSTON
BLANDFORD
BUCKLAND
CHARLEMONT
CHESHIRE
CHESTER
CHESTERFIELD
CHICOPEE
CLARKSBURG
COLRAIN
CONWAY
CUMMINGTON
DALTON
DEERFIELD
EAST LONGMEADOW
EASTHAMPTON
EGREMONT
ERVING
FLORIDA
GILL
GOSHEN
GRANBY
GRANVILLE
GREAT BARRINGTON
GREENFIELD
HADLEY
HAMPDEN
HANCOCK
HATFIELD
HAWLEY
HEATH
HINSDALE
HOLYOKE
HUNTINGTON
LANESBOROUGH
LEE
LENOX
LEVERETT
LEYDEN
LONGMEADOW
LUDLOW
MIDDLEFIELD
MONROE
MONSON
MONTAGUE
MONTEREY
MONTGOMERY
MOUNT WASHINGTON
NEW ASHFORD
NEW MARLBOROUGH
NEW SALEM
NORTH ADAMS

Western Region (CONT)
NORTHAMPTON
NORTHFIELD
ORANGE
OTIS
PALMER
PELHAM
PERU
PETERSHAM
PHILLIPSTON
PITTSFIELD
PLAINFIELD
RICHMOND
ROWE
ROYALSTON
RUSSELL
SANDISFIELD
SAVOY
SHEFFIELD
SHELBURNE
SHUTESBURY
SOUTH HADLEY
SOUTHAMPTON
SOUTHWICK
SPRINGFIELD
STOCKBRIDGE
SUNDERLAND
TOLLAND
TYRINGHAM
WARE
WARWICK
WASHINGTON
WENDELL
WEST SPRINGFIELD
WEST STOCKBRIDGE
WESTFIELD
WESTHAMPTON
WHATELY
WILBRAHAM
WILLIAMSBURG
WILLIAMSTOWN
WINDSOR
WORTHINGTON

Central Region
ASHBURNHAM
ASHBY
AUBURN
AYER
BARRE
BELLINGHAM
BERLIN
BLACKSTONE
BOLTON
BOYLESTON
BRIMFIELD
BROOKFIELD
CHARLTON
CLINTON
DOUGLAS

Central Region (CONT)
DUDLEY
EAST BROOKFIELD
FITCHBURG
FRANKLIN
GARDNER
GRAFTON
GROTON
HARDWICK
HARVARD
HOLDEN
HOLLAND
HOPEDALE
HUBBARDSTON
LANCASTER
LEICESTER
LEOMINSTER
LUNENBURG
MEDWAY
MENDON
MILFORD
MILLBURY
MILLVILLE
NEW BRAINTREE
NORTH BROOKFIELD
NORTHBRIDGE
OAKHAM
OXFORD
PAXTON
PEPPERELL
PRINCETON
RUTLAND
SHIRLEY
SHREWSBURY
SOUTHBRIDGE
SPENCER
STERLING
STURBRIDGE
SUTTON
TEMPLETON
TOWNSEND
UPTON
UXBRIDGE
WALES
WARREN
WEBSTER
WEST BOYLSTON
WEST BROOKFIELD
WESTMINSTER
WINCHENDON
WORCESTER

Northeast Region
AMESBURY
ANDOVER
BEVERLY
BILLERICA
BOXFORD
CHELMSFORD
DANVERS
DRACUT
DUNSTABLE
ESSEX
EVERETT
GEORGETOWN
GLOUCESTER
GROVELAND
HAMILTON
HAVERHILL
IPSWICH
LAWRENCE
LOWELL
LYNN
LYNNFIELD
MALDEN
MANCHESTER
MARBLEHEAD
MEDFORD
MELROSE
MERRIMAC
METHUEN
MIDDLETON
NAHANT
NEWBURY
NEWBURYPORT
NORTH ANDOVER
NORTH READING
PEABODY
READING
ROCKPORT
ROWLEY
SALEM
SALISBURY
SAUGUS
STONEHAM
SWAMPSCOTT
TEWKSBURY
TOPSFIELD
TYNGSBOROUGH
WAKEFIELD
WENHAM
WEST NEWBURY
WESTFORD

Executive Office of Health and Human Services Regions *(cont.)*

Metro West Region
ACTON
ARLINGTON
ASHLAND
BEDFORD
BELMONT
BOXBOROUGH
BRAINTREE
BURLINGTON
CAMBRIDGE
CANTON
CARLISLE
COHASSET
CONCORD
DEDHAM
DOVER
FOXBOROUGH
FRAMINGHAM
HINGHAM
HOLLISTON
HOPKINTON
HUDSON
HULL
LEXINGTON
LINCOLN
LITTLETON
MARLBOROUGH
MAYNARD
MEDFIELD
MILLIS
MILTON
NATICK
NEEDHAM
NEWTON
NORFOLK
NORTHBOROUGH
NORWELL
NORWOOD
PLAINVILLE
QUINCY
RANDOLPH
SCITUATE
SHARON
SHERBORN
SOMERVILLE
SOUTHBOROUGH
STOW
SUDBURY
WALPOLE
WALTHAM
WATERTOWN
WAYLAND
WELLESLEY
WESTBOROUGH

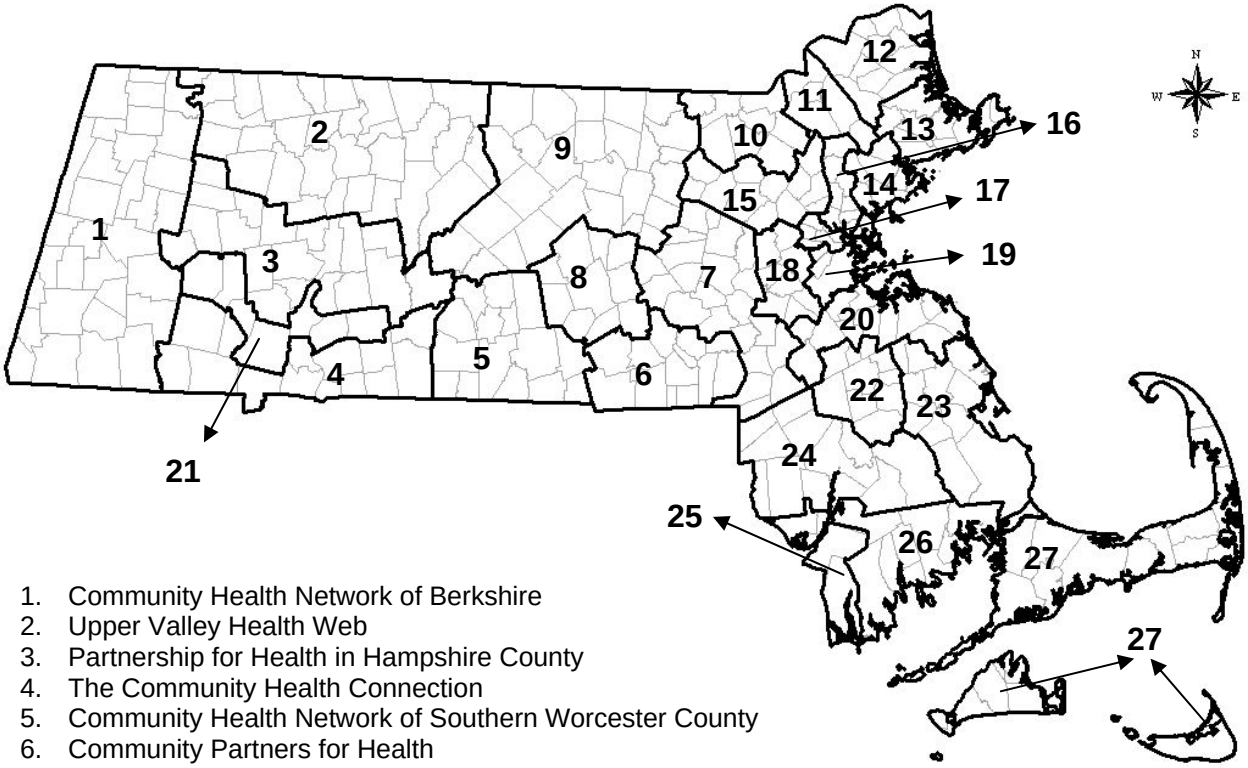
Metro West Region (CONT)
WESTON
WESTWOOD
WEYMOUTH
WILMINGTON
WINCHESTER
WOBURN
WRENTHAM

Southeast Region
ABINGTON
ACUSHNET
ATTLEBORO
AVON
BARNSTABLE
BERKLEY
BOURNE
BREWSTER
BRIDGEWATER
BROCKTON
CARVER
CHATHAM
CHILMARK
DARTMOUTH
DENNIS
DIGHTON
DUXBURY
EAST BRIDGEWATER
EASTHAM
EASTON
EDGARTOWN
FAIRHAVEN
FALL RIVER
FALMOUTH
FREETOWN
GAY HEAD
GOSNOLD
HALIFAX
HANOVER
HANSON
HARWICH
HOLBROOK
KINGSTON
LAKEVILLE
MANSFIELD
MARION
MARSHFIELD
MASHPEE
MATTAPOISETT
MIDDLEBOROUGH
NANTUCKET
NEW BEDFORD
NORTH ATTLEBORO
NORTON

Southeast Region (CONT)
OAK BLUFFS
ORLEANS
PEMBROKE
PLYMOUTH
PLYMPTON
PROVINCETOWN
RAYNHAM
REHOBOTH
ROCHESTER
ROCKLAND
SANDWICH
SEEKONK
SOMERSET
STOUGHTON
SWANSEA
TAUNTON
TISBURY
TRURO
WAREHAM
WELLFLEET
WEST BRIDGEWATER
WEST TISBURY
WESTPORT
WHITMAN
YARMOUTH

Boston Region
BOSTON
BROOKLINE
CHELSEA
REVERE
WINTHROP

Location of Community Health Network Areas (CHNAs) in Massachusetts



1. Community Health Network of Berkshire
2. Upper Valley Health Web
3. Partnership for Health in Hampshire County
4. The Community Health Connection
5. Community Health Network of Southern Worcester County
6. Community Partners for Health
7. Community Health Network of Greater Metro West
8. Common Pathways
9. Community Health Network of Central Massachusetts
10. Greater Lowell Community Health Network
11. Greater Lawrence Community Health Network
12. Greater Haverhill Community Health Network
13. Greater Beverly/Gloucester Community Health Network
14. North Shore Community Health Network
15. Northwest Suburban Health Alliance
16. North Suburban Health Alliance
17. Greater Cambridge/Somerville Community Health Network
18. West Suburban Health Network
19. Alliance for Community Health
20. Blue Hills Community Health Alliance
21. Community Health Network of Chicopee-Holyoke-Ludlow-Westfield
22. Greater Brockton Community Health Network
23. South Shore Community Health Network
24. Greater Attleboro-Taunton Health Education
25. Partners for Healthier Communities
26. Greater New Bedford Community Health Network
27. Cape Cod and Islands Community Health Network

Community Health Network Areas

CHNA 1
ADAMS
ALFORD
BECKET
CHESHIRE
CLARKSBURG
DALTON
EGREMONT
FLORIDA
GREAT BARRINGTON
HANCOCK
HINSDALE
LANESBOROUGH
LEE
LENOX
MONTEREY
MOUNT WASHINGTON
NEW ASHFORD
NEW MARLBOROUGH
NORTH ADAMS
OTIS
PERU
PITTSFIELD
RICHMOND
SANDISFIELD
SAVOY
SHEFFIELD
STOCKBRIDGE
TYRINGHAM
WASHINGTON
WEST STOCKBRIDGE
WILLIAMSTOWN
WINDSOR

CHNA 2
ASHFIELD
ATHOL
BERNARDSTON
BUCKLAND
CHARLEMONT
COLRAIN
CONWAY
DEERFIELD
ERVING
GILL
GREENFIELD
HAWLEY
HEATH
LEVERETT
LEYDEN
MONROE
MONTAGUE
NEW SALEM
NORTHFIELD
ORANGE
PETERSHAM
PHILLIPSTON
ROWE
ROYALSTON
SHELBURNE

CHNA 2 (CONT.)
SHUTESBURY
SUNDERLAND
WARWICK
WENDELL
WHATELY

CHNA 3
AMHERST
BELCHERTOWN
CHESTERFIELD
CUMMINGTON
EASTHAMPTON
GOSHEN
GRANBY
HADLEY
HATFIELD
MIDDLEFIELD
NORTHHAMPTON
PELHAM
PLAINFIELD
SOUTH HADLEY
SOUTHAMPTON
WARE
WESTHAMPTON
WILLIAMSBURG
WORTHINGTON

CHNA 4
AGAWAM
BLANDFORD
EAST LONGMEADOW
GRANVILLE
HAMPDEN
LONGMEADOW
MONSON
PALMER
RUSSELL
SOUTHWICK
SPRINGFIELD
TOLLAND
WEST SPRINGFIELD
WILBRAHAM

CHNA 5
BRIMFIELD
BROOKFIELD
CHARLTON
DUDLEY
EAST BROOKFIELD
HOLLAND
NORTH BROOKFIELD
OXFORD
SOUTHBRIDGE
SPENCER
STURBRIDGE
WALES
WARREN
WEBSTER
WEST BROOKFIELD

CHNA 6
BELLINGHAM
BLACKSTONE
DOUGLAS
FRANKLIN
HOPEDALE
MEDWAY
MENDON
MILFORD
MILLVILLE
NORTHBRIDGE
SUTTON
UPTON
UXBRIDGE

CHNA 7
ASHLAND
FOXBOROUGH
FRAMINGHAM
HOLLISTON
HOPKINTON
HUDSON
MARLBOROUGH
MAYNARD
MEDFIELD
MILLIS
NATICK
NORFOLK
NORTHBOROUGH
PLAINVILLE
SHERBORN
SOUTHBOROUGH
STOW
SUDBURY
WALPOLE
WAYLAND
WESTBOROUGH
WRENTHAM

CHNA 8
AUBURN
BOYLSTON
GRAFTON
HOLDEN
LEICESTER
MILLBURY
PAXTON
SHREWSBURY
WEST BOYLSTON
WORCESTER

CHNA 9
ASHBURNHAM
ASHBY
AYER
BARRE
BERLIN
BOLTON

CHNA 9 (CONT.)
CLINTON
FITCHBURG
GARDNER
GROTON
HARDWICK
HARVARD
HUNNARDSTON
LANCASTER
LEOMINSTER
LUNENBURG
NEW BRAINTREE
OAKHAM
PEPPERELL
PRINCETON
RUTLAND
SHIRLEY
STERLING
TEMPLETON
TOWNSEND
WESTMINSTER
WINCHENDON

CHNA 10
BILLERICA
CHELMSFORD
DRACUT
DUNSTABLE
LOWELL
TEWKSBURY
TYNGSBOROUGH
WESTFORD

CHNA 11
ANDOVER
LAWRENCE
METHUEN
MIDDLETON
NORTH ANDOVER

CHNA 12
AMESBURY
BOXFORD
GEORGETOWN
GROVELAND
HAVERHILL
MERRIMAX
NEWBURY
NEWBURYPORT
ROWLEY
SALISBURY
WEST NEWBURY

Community Health Network Areas, *(cont.)*

CHNA 13
BEVERLY
ESSEX
GLOUCESTER
HAMILTON
IPSWICH
MANCHESTER
ROCKPORT
TOPSFIELD
WENHAM

CHNA 14
DANVERS
LYNN
LYNNFIELD
MARBLEHEAD
NAHANT
PEABODY
SALEM
SAUGUS
SWAMPSCOTT

CHNA 15
ACTON
BEDFORD
BOXBOROUGH
BURLINGTON
CARLISLE
CONCORD
LEXINGTON
LINCOLN
LITTLETON
WILMINGTON
WINCHESTER
WOBURN

CHNA 16
EVERETT
MALDEN
MEDFORD
MELROSE
NORTH READING
READING
STONEHAM
WAKEFIELD

CHNA 17
ARLINGTON
BELMONT
CAMBRIDGE
SOMERVILLE
WATERTOWN

CHNA 18
DEDHAM
DOVER
NEEDHAM
NEWTON
WALTHAM
WELLESLEY
WESTON
WESTWOOD

CHNA 19
BOSTON
BROOKLINE
CHELSEA
REVERE
WINTHROP

CHNA 20
BRAINTREE
CANTON
COHASSET
HINGHAM
HULL
MILTON
NORWELL
NORWOOD
QUINCY
RANDOLPH
SCITUATE
SHARON
WEYMOUTH

CHNA 21
CHESTER
CHICOPEE
HOLYOKE
HUNTINGTON
LUDLOW
MONTGOMERY
WESTFIELD

CHNA 22
ABINGTON
AVON
BRIDGEWATER
BROCKTON
EAST BRIDGEWATER
EASTON
HOLBROOK
STOUGHTON
WEST BRIDGEWATER
WHITMAN

CHNA 23
CARVER
DUXBURY
HALIFAX
HANOVER
HANSON
KINGSTON
MARSHFIELD
PEMBROKE
PLYMOUTH
PLYMPTON
ROCKLAND

CHNA 24
ATTLEBORO
BERKLEY
DIGHTON
LAKEVILLE
MANSFIELD
MIDDLEBOROUGH
NORTH ATTLEBOROUGH
NORTON
RAYNHAM
REHOBOTH
SEEKONK
TAUNTON

CHNA 25
FALL RIVER
SOMERSET
SWANSEA
WESTPORT

CHNA 26
ACUSHNET
DARTMOUTH
FAIRHAVEN
FREETOWN
MARION
MATTAPOISETT
NEW BEDFORD
ROCHESTER
WAREHAM

CHNA 27
AQUINNAH
BARNSTABLE
BOURNE
BREWSTER
CHATHAM
CHILMARK
DENNIS
EASTHAM
EDGARTOWN
FALMOUTH
GOSNOLD
HARWICH
MASHPEE
MANTUCKET
OAK BLUFFS
ORLEANS
PROVINCETOWN
SANDWICH
TISBURY
TRURO
WELLFLEET
WEST TISBURY
WARMOUTH

Massachusetts Regional Planning Agencies

FRANKLIN REGIONAL COUNCIL OF GOVERNMENTS
ASHFIELD
BERNARDSTON
BUCKLAND
CHARLEMONT
COLRAIN
CONWAY
DEERFIELD
ERVING
GILL
GREENFIELD
HAWLEY
HEATH
LEVERETT
LEYDEN
MONROE
MONTAGUE
NEW SALEM
NORTHFIELD
ORANGE
ROWE
SHELBURNE
SHUTESBURY
SUNDERLAND
WARWICK
WENDELL
WHATELY

BERKSHIRE REGIONAL PLANNING COMMISSION
ADAMS
ALFORD
BECKET
CHESHIRE
CLARKSBURG
DALTON
EGREMONT
FLORIDA
GREAT BARRINGTON
HANCOCK
HINSDALE
LANESBOROUGH
LEE
LENOX
MONTEREY
MOUNT WASHINGTON
NEW ASHFORD
NEW MARLBOROUGH
NORTH ADAMS
OTIS
PERU
PITTSFIELD
RICHMOND
SANDISFIELD
SAVOY
SHEFFIELD

BERKSHIRE (CONT)
STOCKBRIDGE
TYRINGHAM
WASHINGTON
WEST STOCKBRIDGE
WILLIAMSTOWN
WINDSOR

OLD COLONY PLANNING COUNCIL
ABINGTON
AVON
BRIDGEWATER
BROCKTON
EAST BRIDGEWATER
EASTON
HALIFAX
HANSON
KINGSTON
PEMBROKE
PLYMOUTH
PLYMPTON
STOUGHTON
WEST BRIDGEWATER
WHITMAN

SOUTHEAST REGIONAL PLANNING / ECONOMIC DEVELOPMENT DISTRICT
ACUSHNET
ATTLEBORO
BERKLEY
CARVER
DARTMOUTH
DIGHTON
FAIRHAVEN
FALL RIVER
FREETOWN
LAKEVILLE
MANSFIELD
MARION
MATTAPOISETT
MIDDLEBOROUGH
NEW BEDFORD
NORTH ATTLEBORO
NORTON
PLAINVILLE
RAYNHAM
REHOBOTH
ROCHESTER
SEEKONK
SOMERSET
SWANSEA
TAUNTON
WAREHAM
WESTPORT

MERRIMACK VALLEY PLANNING COUNCIL
AMESBURY
ANDOVER
BOXFORD
GEORGETOWN
GROVELAND
HAVERHILL
LAWRENCE
MERRIMAC
METHUEN
NEWBURY
NEWBURYPORT
NORTH ANDOVER
ROWLEY
SALISBURY
WEST NEWBURY

NORTHERN MIDDLESEX COUNCIL OF GOVERNMENTS
BILLERICA
CHELMSFORD
DRACUT
DUNSTABLE
LOWELL
PEPPERELL
TEWKSBURY
TYNGSBOROUGH
WESTFORD

CENTRAL MA REGIONAL PLANNING COMMISSION
AUBURN
BARRE
BERLIN
BLACKSTONE
BOYLSTON
BROOKFIELD
CHARLTON
DOUGLAS
DUDLEY
EAST BROOKFIELD
GRAFTON
HARDWICK
HOLDEN
HOPEDALE
LEICESTER
MENDON
MILLBURY
MILLVILLE
NEW BRAINTREE
NORTH BROOKFIELD
NORTHBOROUGH
NORTHBRIDGE
OAKHAM
OXFORD

CENTRAL MA (CONT)
PAXTON
PRINCETON
RUTLAND
SHREWSBURY
SOUTHBRIDGE
SPENCER
STURBRIDGE
SUTTON
UPTON
UXBRIDGE
WARREN
WEBSTER
WEST BOYLSTON
WEST BROOKFIELD
WESTBOROUGH
WORCESTER

MONTACHUSETT REGIONAL PLANNING COMMISSION
ASHBURNHAM
ASHBY
ATHOL
AYER
CLINTON
FITCHBURG
GARDNER
GROTON
HARVARD
HUBBARDSTON
LANCASTER
LEOMINSTER
LUNENBURG
PHILLIPSTON
PETERSHAM
ROYALSTON
SHIRLEY
STERLING
TEMPLETON
TOWNSEND
WESTMINSTER
WINCHENDON

PIONEER VALLEY PLANNING COMMISSION
AGAWAM
AMHERST
BELCHERTOWN
BLANDFORD
BRIMFIELD
CHESTER
CHESTERFIELD
CHICOPEE
CUMMINGTON
EAST LONGMEADOW
EASTHAMPTON
GOSHEN

Massachusetts Regional Planning Agencies *(cont.)*

PIONEER VALLEY (CONT.)
GRANBY
GRANVILLE
HADLEY
HAMPDEN
HATFIELD
HOLLAND
HOLYOKE
HUNTINGTON
LONGMEADOW
LUDLOW
MIDDLEFIELD
MONSON
MONTGOMERY
NORTHAMPTON
PALMER
PELHAM
PLAINFIELD
RUSSELL
SOUTH HADLEY
SOUTHAMPTON
SOUTHWICK
SPRINGFIELD
TOLLAND
WALES
WARE
WEST SPRINGFIELD
WESTFIELD
WESTHAMPTON
WILBRAHAM
WILLIAMSBURG
WORTHINGTON

METROPOLITAN AREA PLANNING COUNCIL
ACTON
ARLINGTON
ASHLAND
BEDFORD
BELLINGHAM
BELMONT
BEVERLY
BOLTON
BOSTON
BOXBOROUGH
BRAINTREE
BROOKLINE
BURLINGTON
CAMBRIDGE
CANTON
CARLISLE
CHELSEA
COHASSET
CONCORD
DANVERS
DEDHAM
DOVER
DUXBURY
ESSEX
EVERETT
FOXBOROUGH
FRAMINGHAM
FRANKLIN
GLOUCESTER
HAMILTON
HANOVER
HINGHAM
HOLBROOK
HOLLISTON
HOPKINTON
HUDSON
HULL
IPSWICH
LEXINGTON
LINCOLN
LITTLETON
LYNN
LYNNFIELD
MALDEN
MANCHESTER
MARBLEHEAD
MARLBOROUGH
MARSHFIELD
MAYNARD
MEDFIELD
MEDFORD
MEDWAY
MELROSE
MIDDLETON
MILFORD
MILLIS
MILTON
NAHANT
NATICK
NEEDHAM
NEWTON
NORFOLK
NORTH READING
NORWELL
NORWOOD
PEABODY
PEMBROKE
QUINCY
RANDOLPH
READING
REVERE
ROCKLAND
ROCKPORT
SALEM
SAUGUS
SCITUATE
SHARON
SHERBORN

MAPC (CONT.)
SOMERVILLE
SOUTHBOROUGH
STONEHAM
STOUGHTON
STOW
SUDBURY
SWAMPSCOTT
TOPSFIELD
WAKEFIELD
WALPOLE
WALTHAM
WATERTOWN
WAYLAND
WELLESLEY
WENHAM
WESTON
WESTWOOD
WEYMOUTH
WILMINGTON
WINCHESTER
WINTHROP
WOBURN
WRENTHAM

NANTUCKET PLANNING & ECONOMIC DEVELOPMENT COMMISSION
NANTUCKET

MARTHA'S VINEYARD COMMISSION
AQUINNAH / GAY HEAD
CHILMARK
EDGARTOWN
GOSNOLD
OAK BLUFFS
TISBURY
WEST TISBURY

CAPE COD COMMISSION
BARNSTABLE
BOURNE
BREWSTER
CHATHAM
DENNIS
EASTHAM
FALMOUTH
HARWICH
MASHPEE
ORLEANS
PROVINCETOWN
SANDWICH
TRURO
WELLFLEET
YARMOUTH

SECTION III.

Statewide Reference Tables by Sex and Age Groups

Table 26. Total Number and Rate of Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury by Sex and Age Group, MA Residents, 2005

	Injury Deaths		Nonfatal Hospital Stays		Nonfatal ED Visits		Total Injuries	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Males	1,740	56.1	31,152	1,004.6	390,714	12,599.5	423,606	13,660.2
<1	4	--	252	617.9	2,446	5,998.0	2,702	6,625.8
1-14	22	3.8	1,967	343.3	75,776	13,223.5	77,765	13,570.6
15-24	272	62.9	4,000	925.0	86,007	19,889.9	90,279	20,877.9
25-44	628	67.8	7,809	842.6	133,155	14,367.9	141,592	15,278.3
45-64	471	60.3	7,960	1,019.1	68,780	8,805.5	77,211	9,884.9
65-74	90	51.1	2,754	1,564.8	10,979	6,238.1	13,823	7,854.0
75-84	145	114.1	3,886	3,059.0	9,356	7,364.8	13,387	10,538.0
85+	108	246.0	2,524	5,750.1	4,215	9,602.5	6,847	15,598.6
Females	917	27.8	34,154	1,035.7	314,901	9,549.0	349,972	10,612.5
<1	4	--	207	533.1	2,062	5,310.2	2,273	5,853.6
1-14	15	2.7	1,186	217.2	52,614	9,636.2	53,815	9,856.1
15-24	84	20.1	2,174	519.8	58,537	13,995.4	60,795	14,535.2
25-44	206	21.6	4,669	490.2	94,908	9,963.7	99,783	10,475.5
45-64	197	23.6	6,428	768.7	63,673	7,614.6	70,298	8,406.9
65-74	69	32.2	3,778	1,765.4	14,874	6,950.4	18,721	8,748.0
75-84	134	69.3	7,942	4,105.4	16,918	8,745.3	24,994	12,920.0
85+	208	211.3	7,770	7,893.1	11,315	11,494.2	19,293	19,598.5
Total	2,657	41.5	65,309	1,020.7	705,660	11,028.1	773,626	12,090.3
<1	8	10.0	459	576.6	4,508	5,662.5	4,975	6,249.1
1-14	37	3.3	3,153	281.8	128,393	11,473.4	131,583	11,758.5
15-24	356	41.8	6,174	725.8	144,555	16,993.0	151,085	17,760.6
25-44	834	44.4	12,478	664.0	228,078	12,136.4	241,390	12,844.7
45-64	668	41.3	14,389	889.7	132,462	8,190.3	147,519	9,121.3
65-74	159	40.8	6,532	1,674.9	25,854	6,629.2	32,545	8,344.8
75-84	279	87.1	11,830	3,691.2	26,277	8,199.1	38,386	11,977.4
85+	316	222.0	10,294	7,232.2	15,530	10,910.8	26,140	18,365.0

*[1] Represents crude rates per 100,000 residents. Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five. **Total includes 1 nonfatal hospital stay for which age was missing and 2 hospital stays for which sex was missing; and 44 nonfatal ED visits for which sex was missing.*

Table 27. Total Number and Rate of Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury by Intent, Sex and Age Groups, MA Residents, 2005

	Unintentional				Suicide/Self-Inflicted				Homicide/Assaults				Undetermined Intent			
	Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Males	1,165	37.6	387,252	12,487.9	354	11.4	4,529	146.0	149	4.8	17,279	557.2	54	1.7	2,644	85.3
<1	3	--	2,598	6,370.8	0	--	0	--	1	--	30	73.6	0	--	6	14.7
1-14	19	3.3	75,135	13,111.7	1	--	128	22.3	2	--	991	172.9	0	--	173	30.2
15-24	150	34.7	79,219	18,320.1	42	9.7	1,385	320.3	75	17.3	6,930	1,602.6	5	1.2	661	152.9
25-44	388	41.9	127,780	13,787.9	153	16.5	2,105	227.1	55	5.9	7,036	759.2	30	3.2	1,152	124.3
45-64	335	42.9	70,984	9,087.7	104	13.3	805	103.1	12	1.5	2,141	274.1	19	2.4	579	74.1
65-74	58	33.0	12,895	7,326.7	23	13.1	52	29.5	4	--	92	52.3	0	--	35	19.9
75-84	118	92.9	12,333	9,708.3	20	15.7	36	28.3	0	--	47	37.0	0	--	23	18.1
85+	94	214.1	6,308	14,370.7	11	25.1	18	41.0	0	--	12	27.3	0	--	15	34.2
Females	718	21.8	323,528	9,810.6	115	3.5	6,783	205.7	28	0.8	8,400	254.7	41	1.2	2,006	60.8
<1	2	--	2,193	5,647.5	0	--	1	--	1	--	16	41.2	1	--	7	18.0
1-14	13	2.4	51,886	9,502.8	1	--	494	90.5	1	--	480	87.9	0	--	168	30.8
15-24	62	14.8	53,706	12,840.3	12	2.9	2,430	581.0	6	1.4	2,932	701.0	3	--	570	136.3
25-44	149	15.6	90,439	9,494.5	28	2.9	2,571	269.9	11	1.2	3,796	398.5	15	1.6	790	82.9
45-64	119	14.2	65,668	7,853.2	54	6.5	1,160	138.7	3	--	1,032	123.4	20	2.4	365	43.7
65-74	52	24.3	17,744	8,291.5	11	5.1	59	27.6	3	--	80	37.4	0	--	46	21.5
75-84	123	63.6	23,630	12,214.9	8	4.1	51	26.4	2	--	50	25.8	0	--	33	17.1
85+	198	201.1	18,262	18,551.2	1	--	17	17.3	1	--	14	14.2	2	--	27	27.4
Total*	1,883	29.4	710,827	11,168.5	469	7.3	11,312	176.8	177	2.8	25,679	401.3	95	1.5	4,650	72.7
<1	5	6.3	4,791	6,018.0	0	--	1	--	2	--	46	57.8	1	--	13	16.3
1-14	32	2.9	127,024	11,351.1	2	--	622	55.6	3	--	1,471	131.5	0	--	341	30.5
15-24	212	24.9	132,936	15,627.1	54	6.3	3,815	448.5	81	9.5	9,862	1,159.3	8	0.9	1,231	144.7
25-44	537	28.6	218,234	11,612.6	181	9.6	4,676	248.8	66	3.5	10,832	576.4	45	2.4	1,942	103.3
45-64	454	28.1	136,661	8,450.0	158	9.8	1,965	121.5	15	0.9	3,173	196.2	39	2.4	944	58.4
65-74	110	28.2	30,640	7,856.4	34	8.7	111	28.5	7	1.8	172	44.1	0	--	81	20.8
75-84	241	75.2	35,968	11,222.9	28	8.7	87	27.1	2	--	97	30.3	0	--	56	17.5
85+	292	205.1	24,570	17,262.0	12	8.4	35	24.6	1	--	26	18.3	2	--	42	29.5

*[1] Represents crude rates per 100,000 residents. Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five. **Total includes 1 unintentional nonfatal case for which age was missing and 45 cases for which sex was missing.*

Table 28. Total Number and Rate of Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury by Sex and Age Groups for Selected Causes, MA Residents, 2005

	Poisonings				Falls				Cut/pierce				Overexertion			
	Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Males	529	17.1	9,768	315.0	149	4.8	91,054	2,936.3	45	1.5	50,835	1,639.3	0	--	46,129	1,487.5
<1	0	--	71	174.1	0	--	1,364	3,344.8	0	--	91	223.1	0	--	89	218.2
1-14	1	--	1,047	182.7	0	--	23,934	4,176.7	0	--	5,665	988.6	0	--	4,822	841.5
15-24	48	11.1	1,892	437.5	5	1.2	11,202	2,590.6	16	3.7	12,078	2,793.2	0	--	10,266	2,374.1
25-44	283	30.5	3,820	412.2	14	1.5	20,972	2,263.0	18	1.9	20,065	2,165.1	0	--	20,611	2,224.0
45-64	188	24.1	2,408	308.3	36	4.6	17,273	2,211.4	9	1.2	10,283	1,316.5	0	--	8,729	1,117.5
65-74	2	--	243	138.1	15	8.5	5,081	2,886.9	2	--	1,513	859.7	0	--	891	506.3
75-84	5	3.9	196	154.3	44	34.6	6,860	5,400.0	0	--	877	690.4	0	--	559	440.0
85+	2	--	91	207.3	35	79.7	4,368	9,951.0	0	--	263	599.2	0	--	162	369.1
Females	273	8.3	10,263	311.2	134	4.1	109,089	3,308.0	10	0.3	26,959	817.5	0	--	39,270	1,190.8
<1	1	--	57	146.8	0	--	1,139	2,933.2	0	--	74	190.6	0	--	94	242.1
1-14	1	--	1,088	199.3	1	--	17,470	3,199.6	0	--	3,548	649.8	0	--	5,445	997.2
15-24	28	6.7	2,620	626.4	4	--	9,192	2,197.7	3	--	5,446	1,302.1	0	--	7,411	1,771.9
25-44	125	13.1	3,613	379.3	4	--	19,865	2,085.5	3	--	9,754	1,024.0	0	--	14,629	1,535.8
45-64	100	12.0	2,097	250.8	12	1.4	22,645	2,708.1	2	--	6,013	719.1	0	--	8,619	1,030.7
65-74	8	3.7	332	155.1	12	5.6	9,186	4,292.5	1	--	951	444.4	0	--	1,374	642.0
75-84	8	4.1	298	154.0	40	20.7	15,572	8,049.5	1	--	793	409.9	0	--	1,191	615.7
85+	2	--	158	160.5	61	62.0	14,020	14,242.0	0	--	380	386.0	0	--	507	515.0
Total*	802	12.5	20,031	313.0	283	4.4	200,152	3,128.0	55	0.9	77,801	1,215.9	0	--	85,402	1,334.7
<1	1	--	128	160.8	0	--	2,503	3,144.0	0	--	165	207.3	0	--	183	229.9
1-14	2	--	2,135	190.8	1	--	41,405	3,700.0	0	--	9,213	823.3	0	--	10,267	917.5
15-24	76	8.9	4,512	530.4	9	1.1	20,395	2,397.5	19	2.2	17,525	2,060.1	0	--	17,677	2,078.0
25-44	408	21.7	7,433	395.5	18	1.0	40,837	2,173.0	21	1.1	29,820	1,586.8	0	--	35,242	1,875.3
45-64	288	17.8	4,505	278.6	48	3.0	39,922	2,468.4	11	0.7	16,300	1,007.9	0	--	17,349	1,072.7
65-74	10	2.6	575	147.4	27	6.9	14,267	3,658.2	3	--	2,464	631.8	0	--	2,265	580.8
75-84	13	4.1	494	154.1	84	26.2	22,434	7,000.0	1	--	1,670	521.1	0	--	1,750	546.0
85+	4	--	249	174.9	96	67.4	18,388	12,918.7	0	--	643	451.7	0	--	669	470.0

[1] Represents crude rates per 100,000 residents. Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five.
***Total includes 9 nonfatal fall cases; 7 nonfatal cut/pierce cases; and 4 nonfatal cases of overexertion for which sex was missing.*

Table 28. Total Number and Rate of Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury by Sex and Age Groups for Selected Causes, MA Residents, 2005

	Natural/environmental				MV Occupant[1]				Pedestrian[2]				Pedal Cyclist[2]			
	Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Males	8	0.3	14,531	468.6	253	8.2	39,243	1,265.5	54	1.7	2,706	87.3	5	0.2	6,932	223.5
<1	0	--	84	206.0	0	--	56	137.3	0	--	3	--	0	--	1	--
1-14	0	--	3,293	574.7	3	--	2,005	349.9	2	--	435	75.9	1	--	2,986	521.1
15-24	1	--	1,891	437.3	73	16.9	11,916	2,755.7	4	--	575	133.0	1	--	1,495	345.7
25-44	1	--	4,187	451.8	74	8.0	16,203	1,748.4	11	1.2	934	100.8	2	--	1,460	157.5
45-64	0	--	3,482	445.8	65	8.3	7,217	924.0	19	2.4	541	69.3	0	--	867	111.0
65-74	1	--	855	485.8	18	10.2	1,019	579.0	6	3.4	125	71.0	0	--	77	43.8
75-84	1	--	592	466.0	15	11.8	652	513.2	7	5.5	72	56.7	1	--	37	29.1
85+	4	--	147	334.9	5	11.4	175	398.7	5	11.4	21	47.8	0	--	9	20.5
Females	9	0.3	14,381	436.1	116	3.5	43,993	1,334.0	25	0.8	2,007	60.9	1	--	2,177	66.0
<1	0	--	65	167.4	0	--	31	79.8	0	--	3	--	0	--	0	--
1-14	0	--	2,845	521.1	5	0.9	2,289	419.2	0	--	287	52.6	0	--	1,171	214.5
15-24	0	--	1,863	445.4	31	7.4	13,982	3,342.9	3	--	475	113.6	1	--	284	67.9
25-44	2	--	3,871	406.4	30	3.1	17,215	1,807.3	5	0.5	590	61.9	0	--	394	41.4
45-64	1	--	3,735	446.7	24	2.9	7,892	943.8	7	0.8	426	50.9	0	--	280	33.5
65-74	0	--	985	460.3	9	4.2	1,289	602.3	5	2.3	117	54.7	0	--	41	19.2
75-84	1	--	734	379.4	9	4.7	1,008	521.1	2	--	88	45.5	0	--	7	3.6
85+	5	5.1	283	287.5	8	8.1	287	291.5	3	--	21	21.3	0	--	0	0.0
Total*	17	0.3	28,914	451.9	369	5.8	83,241	1,300.9	79	1.2	4,713	73.7	6	0.1	9,110	142.4
<1	0	--	149	187.2	0	--	87	109.3	0	--	6	7.5	0	--	1	--
1-14	0	--	6,138	548.5	8	0.7	4,294	383.7	2	--	722	64.5	1	--	4,157	371.5
15-24	1	--	3,755	441.4	104	12.2	25,900	3,044.6	7	0.8	1,050	123.4	2	--	1,779	209.1
25-44	3	--	8,059	428.8	104	5.5	33,421	1,778.4	16	0.9	1,524	81.1	2	--	1,855	98.7
45-64	1	--	7,217	446.2	89	5.5	15,109	934.2	26	1.6	967	59.8	0	--	1,147	70.9
65-74	1	--	1,840	471.8	27	6.9	2,308	591.8	11	2.8	242	62.1	0	--	118	30.3
75-84	2	--	1,326	413.7	24	7.5	1,660	518.0	9	2.8	160	49.9	1	--	44	13.7
85+	9	6.3	430	302.1	13	9.1	462	324.6	8	5.6	42	29.5	0	--	9	6.3

** Represents crude rates per 100,000 residents. Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five. **Total includes 2 nonfatal natural/environmental cases; 1 nonfatal pedal cyclist case; 7 nonfatal MV occupant cases for which sex was missing; and 1 nonfatal MV occupant case for which age was missing. [1] Motor vehicle occupant includes drivers and passengers of motorcycles and other motor vehicles. Unspecified persons are assumed to be occupants in most cases and are also included in this category. [2] This category includes persons injured in traffic and non-traffic incidents.*

Table 28. Total Number and Rate of Injury Deaths and Acute Care Hospital Cases Associated with Nonfatal Injury by Sex and Age Groups for Selected Causes, MA Residents, 2005 *(continued)*

	Struck by/against				Fire/Burn				Machinery				Suffocation/Hanging			
	Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries		Injury Deaths		Nonfatal Injuries	
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Males	18	0.6	77,435	2,497.1	22	0.7	5,858	188.9	4	--	4,135	133.3	227	7.3	557	18.0
<1	0	--	294	720.9	0	--	108	264.8	0	--	0	--	3	--	33	80.9
1-14	0	--	21,002	3,665.0	2	--	942	164.4	0	--	64	11.2	4	--	101	17.6
15-24	2	--	22,612	5,229.2	2	--	1,096	253.5	1	--	709	164.0	38	8.8	55	12.7
25-44	8	0.9	22,557	2,434.0	5	0.5	2,217	239.2	2	--	1,757	189.6	88	9.5	124	13.4
45-64	7	0.9	8,992	1,151.2	8	1.0	1,216	155.7	1	--	1,262	161.6	45	5.8	90	11.5
65-74	1	--	1,005	571.0	2	--	152	86.4	0	--	206	117.0	13	7.4	48	27.3
75-84	0	--	688	541.6	2	--	86	67.7	0	--	115	90.5	20	15.7	71	55.9
85+	0	--	285	649.3	1	--	41	93.4	0	--	22	50.1	16	36.5	35	79.7
Females	3	--	39,087	1,185.3	23	0.7	5,099	154.6	0	--	616	18.7	99	3.0	546	16.6
<1	0	--	232	597.5	0	--	83	213.7	0	--	1	--	2	--	35	90.1
1-14	0	--	10,011	1,833.5	1	--	692	126.7	0	--	36	6.6	4	--	105	19.2
15-24	0	--	8,987	2,148.7	0	--	1,049	250.8	0	--	122	29.2	8	1.9	41	9.8
25-44	0	--	10,851	1,139.2	4	--	1,715	180.0	0	--	242	25.4	19	2.0	69	7.2
45-64	0	--	5,968	713.7	6	0.7	1,091	130.5	0	--	184	22.0	16	1.9	86	10.3
65-74	1	--	1,116	521.5	7	3.3	187	87.4	0	--	20	9.3	14	6.5	60	28.0
75-84	1	--	1,172	605.8	5	2.6	195	100.8	0	--	8	4.1	18	9.3	81	41.9
85+	1	--	750	761.9	0	--	87	88.4	0	--	3	--	18	18.3	69	70.1
Total*	21	0.3	116,534	1,821.2	45	0.7	10,957	171.2	4	0.1	4,751	74.2	326	5.1	1,103	17.2
<1	0	--	526	660.7	0	--	191	239.9	0	--	1	--	5	6.3	68	85.4
1-14	0	--	31,014	2,771.5	3	--	1,634	146.0	0	--	100	8.9	8	0.7	206	18.4
15-24	2	--	31,603	3,715.0	2	--	2,145	252.2	1	--	831	97.7	46	5.4	96	11.3
25-44	8	0.4	33,412	1,777.9	9	0.5	3,932	209.2	2	--	1,999	106.4	107	5.7	193	10.3
45-64	7	0.4	14,960	925.0	14	0.9	2,307	142.6	1	--	1,446	89.4	61	3.8	176	10.9
65-74	2	--	2,122	544.1	9	2.3	339	86.9	0	--	226	57.9	27	6.9	108	27.7
75-84	1	--	1,861	580.7	7	2.2	281	87.7	0	--	123	38.4	38	11.9	152	47.4
85+	1	--	1,035	727.2	1	--	128	89.9	0	--	25	17.6	34	23.9	104	73.1

[1] Represents crude rates per 100,000 residents. Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five.
***Total includes 5 nonfatal struck by/against cases; and 2 nonfatal fire/burn cases for which sex was missing.*

Table 29. Total Number and Rate of Injury Deaths and Injury-related Acute Care Hospital Cases Due to Unintentional Motor Vehicle Traffic[1] Injuries, MA Residents, 2000-2005

	2000		2001		2002		2003		2004		2005	
Deaths	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	0	--	0	--	0	--	0	--	0	--	0	--
1-14 years	16	1.4	19	1.7	5	0.4	17	1.5	19	1.7	10	0.9
15-24 years	116	14.1	124	14.9	127	15.1	125	14.7	128	15.0	111	13.0
25-44 years	133	6.7	171	8.6	168	8.6	146	7.5	146	7.6	119	6.3
45-64 years	107	7.5	104	7.0	107	7.0	95	6.1	119	7.5	113	7.0
65-74 years	37	8.6	36	8.6	40	9.8	42	10.5	24	6.1	38	9.7
75-84 years	52	16.5	62	19.4	59	18.3	62	19.2	46	14.3	34	10.6
85+ years	12	10.3	19	15.7	16	12.7	19	14.4	26	19.1	21	14.8
Total	473	7.4	535	8.4	522	8.1	506	7.9	508	7.9	446	7.0
Nonfatal Hospital Stays	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	2	--	3	--	6	7.4	8	10.1	7	8.8	10	12.6
1-14 years	237	20.1	294	25.6	322	27.9	301	26.4	316	27.9	241	21.5
15-24 years	1,216	148.3	1,286	154.1	1,482	175.9	1,360	160.2	1,459	171.6	1,363	160.2
25-44 years	1,726	86.7	1,667	83.9	1,765	90.1	1,709	88.3	1,672	87.7	1,624	86.4
45-64 years	938	66.1	1,062	71.6	1,107	72.9	1,073	69.0	1,136	71.6	1,225	75.7
65-74 years	386	90.2	375	89.7	357	87.2	341	84.9	338	85.4	348	89.2
75-84 years	444	140.7	378	118.2	458	142.4	408	126.6	419	130.2	375	117.0
85+ years	132	113.1	112	92.3	165	131.3	154	117.1	138	101.7	152	106.8
Total**	5,181	81.6	5,177	81.0	5,662	88.3	5,354	83.4	5,486	85.6	5,338	83.4
Nonfatal ED Visits					Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	Data were not collected prior to 2002				67	83.2	79	99.3	78	98.0	84	105.5
1-14 years					6,519	565.0	6,288	550.5	5,514	487.0	5,048	451.1
15-24 years					32,167	3,818.5	32,147	3,787.2	29,060	3,417.6	25,900	3,044.6
25-44 years					41,543	2,120.1	41,814	2,160.5	37,295	1956.5	33,675	1,791.9
45-64 years					15,757	1,037.6	16,669	1,071.2	15,547	980.3	14,973	925.8
65-74 years					2,396	585.4	2,496	621.3	2,438	616.3	2,211	566.9
75-84 years					1,749	543.7	1,758	545.6	1,681	522.3	1,435	447.8
85+ years					413	328.7	354	269.1	395	291.0	351	246.6
Total**					100,612	1,569.2	101,608	1,583.3	92,010	1,436.0	83,677	1,307.7

**Rates are age-specific (i.e., number of cases per 100,000 persons per age group). Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five. **Total includes cases for which age or sex was missing. [1] Includes any injury or death involving a motor vehicle including motorcycles (includes drivers, passengers, unspecified or other persons, pedestrians, and pedal cyclists).*

Table 30. Total Number and Rate of Injury Deaths and Injury-related Acute Care Hospital Cases Due to Unintentional Falls, MA Residents, 2000-2005

	2000		2001		2002		2003		2004		2005	
Deaths	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	0	--	1	--	1	--	0	--	1	--	0	--
1-14 years	1	--	2	--	3	--	2	--	3	--	1	--
15-24 years	3	--	2	--	5	0.6	4	--	3	--	7	0.8
25-44 years	12	0.6	17	0.9	14	0.7	19	1.0	15	0.8	10	0.5
45-64 years	30	2.1	35	2.4	37	2.4	35	2.2	50	3.1	43	2.7
65-74 years	28	6.5	34	8.1	28	6.8	19	4.7	33	8.3	27	6.9
75-84 years	60	19.0	77	24.1	65	20.2	72	22.3	80	24.8	84	26.2
85+ years	66	56.6	72	59.3	69	54.9	97	73.7	87	63.9	95	66.7
Total	200	3.2	240	3.8	222	3.5	248	3.9	272	4.2	267	4.2
Nonfatal Hospital Stays	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	126	161.5	157	194.0	149	185.0	152	191.0	170	213.6	190	238.7
1-14 years	1,227	103.9	1,269	110.4	1,207	104.6	1,248	109.3	1,182	104.4	1,110	99.2
15-24 years	647	78.9	753	90.2	699	83.0	728	85.8	700	82.3	682	80.2
25-44 years	2,344	117.8	2,456	123.6	2,075	105.9	2,473	127.8	2,268	119.0	2,179	115.9
45-64 years	3,740	263.4	4,081	275.3	3,855	253.8	4,753	305.5	4,720	297.6	5,025	310.7
65-74 years	3,426	800.8	3,527	843.9	3,399	830.4	3,547	883.0	3,529	892.2	3,571	915.6
75-84 years	7,518	2,381.8	7,475	2,337.8	7,453	2,316.9	7,918	2,457.5	7,983	2,480.5	7,944	2,478.7
85+ years	7,430	6,367.2	7,142	5,885.1	7,202	5,731.9	7,691	5,847.5	7,828	5,767.2	7,836	5,505.3
Total**	26,458	416.7	26,860	420.0	26,040	406.1	28,510	444.2	28,380	442.9	28,537	446.0
Nonfatal ED Visits					Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year					2,291	2,843.9	2,327	2,924.8	2,360	2,965.8	2,313	2,905.4
1-14 years					46,173	4,001.9	45,384	3,973.2	42,218	3,729.1	40,274	3,599.0
15-24 years					20,045	2,379.5	21,679	2,554.0	19,639	2,309.7	19,661	2,311.2
25-44 years					39,320	2,006.6	44,191	2,283.3	39,124	2,052.4	38,582	2,053.0
45-64 years	Data were not collected prior to 2002				29,605	1,949.4	35,599	2,287.8	34,293	2,162.2	34,869	2,156.0
65-74 years					10,372	2,534.0	11,443	2,848.5	11,057	2,795.3	10,691	2,741.3
75-84 years					14,522	4,514.5	14,969	4,646.0	14,892	4,627.4	14,488	4,520.6
85+ years					10,145	8,074.2	10,215	7,766.5	10,477	7,718.8	10,552	7,413.4
Total**					172,473	2,690.0	185,812	2,895.4	174,062	2,716.6	171,431	2,679.1

**Rates are age-specific (i.e., number of cases per 100,000 persons per age group). Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five. **Total includes cases for which age or sex was missing.*

Table 31. Total Number and Rate of Injury Deaths and Injury-related Acute Care Hospital Cases Due to Unintentional and Undetermined Poisonings, MA Residents, 2000-2005

	2000		2001		2002		2003		2004		2005	
Deaths	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	0	--	0	--	1	--	2	--	0	--	1	1.3
1-14 years	0	--	1	--	0	--	0	--	3	--	2	0.2
15-24 years	53	6.5	56	6.7	53	6.3	90	10.6	75	8.8	66	7.8
25-44 years	292	14.7	391	19.7	352	18.0	441	22.8	359	18.8	368	19.6
45-64 years	121	8.5	155	10.5	177	11.7	193	12.4	192	12.1	243	15.0
65-74 years	9	2.1	6	1.4	6	1.5	10	2.5	3	--	5	--
75-84 years	8	2.5	4	--	10	3.1	7	2.2	4	--	8	2.5
85+ years	2	--	7	5.8	3	--	6	4.6	3	--	2	--
Total	485	7.6	620	9.7	602	9.4	749	11.7	639	10.0	695	10.9
Nonfatal Hospital Stays	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	11	14.1	20	24.7	15	18.6	20	25.1	14	17.6	24	30.1
1-14 years	325	27.5	282	24.5	267	23.1	204	17.9	232	20.5	222	19.8
15-24 years	396	48.3	401	48.0	421	50.0	425	50.1	427	50.2	417	49.0
25-44 years	948	47.6	930	46.8	1,002	51.1	1,129	58.3	1,124	59.0	1166	62.0
45-64 years	531	37.4	616	41.6	765	50.4	816	52.4	1,037	65.4	1136	70.2
65-74 years	182	42.5	183	43.8	180	44.0	207	51.5	215	54.4	267	68.5
75-84 years	202	64.0	215	67.2	246	76.5	210	65.2	278	86.4	250	78.0
85+ years	84	72.0	80	65.9	96	76.4	110	83.6	116	85.5	124	87.1
Total**	2,679	42.2	2,727	42.6	2,992	46.7	3,121	48.6	3,443	53.7	3606	56.4
Nonfatal ED Visits					Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	Data were not collected prior to 2002				97	120.4	117	147.1	132	165.9	103	129.4
1-14 years					1,764	152.9	1,674	146.6	1,693	149.5	1639	146.5
15-24 years					1,924	228.4	1,937	228.2	1,923	226.2	1954	229.7
25-44 years					3,287	167.7	3,460	178.8	3,291	172.6	3168	168.6
45-64 years					1,462	96.3	1,606	103.2	1,770	111.6	1895	117.2
65-74 years					211	51.5	200	49.8	228	57.6	227	58.2
75-84 years					167	51.9	131	40.7	171	53.1	189	59.0
85+ years					58	46.2	70	53.2	66	48.6	102	71.7
Total**					8,970	139.9	9,195	143.3	9,274	144.7	9277	145.0

**Rates are age-specific (i.e., number of cases per 100,000 persons per age group). Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five. **Total includes cases for which age or sex was missing.*

Table 32. Total Number and Rate of Injury Deaths and Injury-related Acute Care Hospital Cases Due to Unintentional Traumatic Brain Injury, MA Residents, 2000-2005

	2000		2001		2002		2003		2004		2005	
Deaths	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	0	--	2	--	0	--	0	--	2	--	0	--
1-14 years	11	0.9	13	1.1	7	0.6	8	0.7	8	0.7	6	0.5
15-24 years	44	5.4	52	6.2	57	6.8	46	5.4	43	5.1	63	7.4
25-44 years	48	2.4	76	3.8	58	3.0	48	2.5	42	2.2	58	3.1
45-64 years	58	4.1	63	4.2	63	4.1	44	2.8	71	4.5	74	4.6
65-74 years	43	10.1	33	7.9	36	8.8	28	7.0	33	8.3	32	8.2
75-84 years	73	23.1	84	26.3	73	22.7	60	18.6	61	18.9	79	24.6
85+ years	91	78.0	78	64.3	60	47.7	73	55.5	71	52.2	79	55.5
Total	368	5.8	401	6.3	354	5.5	307	4.8	331	5.2	391	6.1
Nonfatal Hospital Stays	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	118	151.3	145	179.2	155	192.4	162	203.6	183	230.0	178	223.6
1-14 years	610	51.6	575	50.0	500	43.3	536	46.9	502	44.3	489	43.7
15-24 years	653	79.6	673	80.6	728	86.4	801	94.4	809	95.1	820	96.4
25-44 years	872	43.8	819	41.2	920	47.0	925	47.8	917	48.1	926	49.3
45-64 years	681	48.0	706	47.6	800	52.7	859	55.2	983	62.0	1166	72.1
65-74 years	403	94.2	390	93.3	407	99.4	465	115.8	495	125.1	492	126.2
75-84 years	658	208.5	684	213.9	714	222.0	769	238.7	910	282.8	846	264.0
85+ years	532	455.9	509	419.4	559	444.9	657	499.5	714	526.0	740	519.9
Total**	4,527	71.3	4,501	70.4	4,784	74.6	5,174	80.6	5,513	86.0	5657	88.4
Nonfatal ED Visits					Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
<1 year	Data were not collected prior to 2002				1,179	1,463.5	1,265	1,590.0	1,326	1,666.4	1404	1,763.6
1-14 years					8,081	700.4	8,528	746.6	8,412	743.0	8768	783.5
15-24 years					5,897	700.0	6,374	750.9	6,548	770.1	6964	818.6
25-44 years					6,191	315.9	6,856	354.2	6,856	359.7	7189	382.5
45-64 years					3,536	232.8	4,321	277.7	4,604	290.3	5188	320.8
65-74 years					1,094	267.3	1,288	320.6	1,430	361.5	1535	393.6
75-84 years					1,667	518.2	1,878	582.9	1,984	616.5	2291	714.8
85+ years					1,253	997.2	1,397	1,062.1	1,643	1,210.5	1913	1,344.0
Total**					28,898	450.7	31,907	497.2	32,803	512.0	35252	550.9

**Rates are age-specific (i.e., number of cases per 100,000 persons per age group). Rates based on counts less than 20 may be unstable and should be interpreted with caution. Rates are not calculated on counts less than five. **Total includes cases for which age or sex was missing.*

Table 33. Nature of Injury by Body Region: Total Count of Injuries among Injury-related Hospital Stay Cases, MA Residents, 2005[1]

Body Region		Nature of Injury									TOTAL
		Fractures	Dislocations	Sprains & strains	Internal	Open wound	Contusion/ superficial	Burns	Other	Unspecified	
Head & Neck	*Total Head and Neck (includes Traumatic Brain Injuries)*	*4,129*	*16*	*3*	*4,398*	*5,998*	*4,256*	*202*	*109*	*1,223*	*20,334*
Spine & Back	Spinal Cord Injury	156	0	0	150	0	0	0	0	0	306
	Vertebral Column Injury	3,777	150	822	0	0	0	0	0	0	4,749
	Total Spine and Back	*3,933*	*150*	*822*	*150*	*0*	*0*	*0*	*0*	*0*	*5,055*
Torso	Chest/thorax	3,025	11	54	1,985	174	991	65	46	0	6,351
	Abdomen	0	0	0	1,879	240	441	61	49	0	2,670
	Pelvis/urogenital	2,287	13	160	733	142	32	13	16	0	3,396
	Trunk	0	0	0	0	23	402	21	5	374	825
	Back and buttocks	0	0	88	0	143	620	82	1	0	934
	Total torso	*5,312*	*24*	*302*	*4,597*	*722*	*2,486*	*242*	*117*	*374*	*14,176*
Extremity	Upper extremity	7,643	471	1,409	0	2,836	2,276	446	669	235	15,985
	Lower extremity	15,323	718	1,974	0	1,513	3,561	302	167	270	23,828
	Total extremities	*22,966*	*1,189*	*3,383*	*0*	*4,349*	*5,837*	*748*	*836*	*505*	*39,813*
Other & Unspecified	Other and unspecified	10	6	169	15	34	871	368	130	154	1,757
	System wide and late effects										18,026
	Total Other & Unspecified	*10*	*6*	*169*	*15*	*34*	*871*	*368*	*130*	*154*	*19,783*
	TOTAL	***36,350***	***1,385***	***4,679***	***9,160***	***11,103***	***13,450***	***1,560***	***1,192***	***2,256***	***99,161***

[1] Modified version of The Barell Injury Diagnosis Matrix, Classification by Body Region and Nature of the Injury.
Totals included in this matrix will not total that of other tables since it reflects the total count of injuries sustained by an individual rather than the count of injury-related hospital stays.

Table 34. Nature of Injury by Body Region: Total Count of Injuries among Unintentional Fall-related Hospital Stay Cases, MA Residents, 2005[1]

Body Region		Nature of Injury									TOTAL
		Fractures	Dislocations	Sprains & strains	Internal	Open wound	Contusion/ superficial	Burns	Other	Unspecified	
Head & Neck	*Total Head and Neck (includes Traumatic Brain Injuries)*	*1,573*	*1*	*0*	*2,159*	*2,795*	*2,449*	*0*	*10*	*708*	*9,695*
Spine & Back	Spinal Cord Injury	77	0	0	73	0	0	0	0	0	150
	Vertebral Column Injury	1,970	69	228	0	0	0	0	0	0	2,267
	Total Spine and Back	*2,047*	*69*	*228*	*73*	*0*	*0*	*0*	*0*	*0*	*2,417*
Torso	Chest/thorax	1,498	4	7	470	10	501	0	6	0	2,496
	Abdomen	0	0	0	317	11	148	2	4	0	482
	Pelvis/urogenital	1,474	1	50	52	10	7	0	0	0	1,594
	Trunk	0	0	0	0	6	87	0	0	162	255
	Back and buttocks	0	0	24	0	9	458	0	0	0	491
	Total torso	*2,972*	*5*	*81*	*839*	*46*	*1,201*	*2*	*10*	*162*	*5,318*
Extremity	Upper extremity	4,788	278	446	0	480	990	8	58	106	7,154
	Lower extremity	11,024	193	892	0	266	1,913	4	16	155	14,463
	Total extremities	*15,812*	*471*	*1,338*	*0*	*746*	*2,903*	*12*	*74*	*261*	*21,617*
Other & Unspecified	Other and unspecified	4	2	24	1	7	368	0	21	45	472
	System wide and late effects										360
	Total Other & Unspecified	*4*	*2*	*24*	*1*	*7*	*368*	*0*	*21*	*45*	*832*
TOTAL		***22,408***	***548***	***1,671***	***3,072***	***3,594***	***6,921***	***14***	***115***	***1,176***	***39,879***

[1] Modified version of The Barell Injury Diagnosis Matrix, Classification by Body Region and Nature of the Injury. Totals included in this matrix will not total that of other tables since it reflects the total count of injuries sustained by an individual rather than the count of injury-related hospital stays.

Table 35. Nature of Injury by Body Region: Total Count of Injuries among Motor Vehicle Occupant-related Hospital Stay Cases, MA Residents, 2005[1]

Body Region		Nature of Injury									TOTAL
		Fractures	Dislocations	Sprains & strains	Internal	Open wound	Contusion/ superficial	Burns	Other	Unspecified	
Head & Neck	*Total Head and Neck (includes Traumatic Brain Injuries)*	*616*	*1*	*1*	*947*	*1,089*	*505*	*8*	*20*	*160*	*3,347*
Spine & Back	Spinal Cord Injury	30	0	0	21	0	0	0	0	0	51
	Vertebral Column Injury	576	39	205	0	0	0	0	0	0	820
	Total Spine and Back	*606*	*39*	*205*	*21*	*0*	*0*	*0*	*0*	*0*	*871*
Torso	Chest/thorax	685	3	2	617	5	263	1	10	0	1,586
	Abdomen	0	0	0	523	5	94	1	7	0	630
	Pelvis/urogenital	334	2	6	18	2	0	0	1	0	363
	Trunk	0	0	0	0	0	81	0	0	54	135
	Back and buttocks	0	0	7	0	6	30	4	0	0	47
	Total torso	*1,019*	*5*	*15*	*1,158*	*18*	*468*	*6*	*18*	*54*	*2,761*
Extremity	Upper extremity	770	35	50	0	237	269	10	40	19	1,430
	Lower extremity	941	79	68	0	169	313	3	11	19	1,603
	Total extremities	*1,711*	*114*	*118*	*0*	*406*	*582*	*13*	*51*	*38*	*3,033*
Other & Unspecified	Other and unspecified	0	1	2	2	7	171	6	7	36	232
	System wide and late effects										119
	Total Other & Unspecified	*0*	*1*	*2*	*2*	*7*	*171*	*6*	*7*	*36*	*351*
	TOTAL	***3,952***	***160***	***341***	***2,128***	***1,520***	***1,726***	***33***	***96***	***288***	***10,363***

[1] Modified version of The Barell Injury Diagnosis Matrix, Classification by Body Region and Nature of the Injury.
Totals included in this matrix will not total that of other tables since it reflects the total count of injuries sustained by an individual rather than the count of injury-related hospital stays.

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APPENDIX

Technical Notes and Methodology

Definitions:

Inpatient Hospital Discharges:	Individuals discharged from an acute care hospital.
Observation Stays:	Individuals discharged from an observation bed of an acute care hospital.
Hospital Stays:	Combines hospital discharges and observation bed stays into one category to assist in interpreting analysis.
ED Visits:	Individuals discharged from the emergency department of an acute care hospital.

Injury Parameters:

Injuries are classified using multiple parameters. For example, an injury may be classified by a diagnosis (e.g., a fracture), or by the mechanism or external cause of the injury (e.g., a fall). Injuries are also classified by intent: unintentional ("accidents") or intentional (assaults/homicides or self-inflicted/suicides).

In this report injuries are classified by their external cause and intent according to the International Classification of Diseases (ICD) system. In 1999 a revised version, ICD-10, was implemented for classifying deaths. Certain injury categories may not be comparable between ICD-9 (the previous version) and ICD-10.

A modified version of the *Matrix of E-code Groupings for Presenting Injury Mortality and Morbidity Data*, developed by the Centers for Disease Control and Prevention, was used to group injury categories. This grouping of ICD-9 and ICD-10 external causes of injury codes can be found on pages 51 and 52.

Data Sources and Inclusion Criteria:

Injury Deaths:

Source: Registry of Vital Records and Statistics, Mass. Dept. of Public Health.

An injury death is defined as any death with an ICD-10 code of V01-Y36, Y40-Y89, U01-U03 in the underlying cause field. This includes Adverse Effects of Medical Care and Drugs.

Massachusetts residents who died in or out-of-state are included in these analyses; out-of-state residents who died in Massachusetts are *not* included.

Injury-Related Hospitalizations:

Source: Massachusetts Inpatient Hospital Discharge Database, MA Division of Health Care Finance and Policy.

An injury-related hospital discharge case is defined as:
any case having an ICD9-CM Nature of Injury Code of: 800-908, 9090-9092, 9094, 9099, 910-994, 99550-99559, 99580-99585, assigned to any of the ICD9 diagnosis fields.

Injury-related hospital discharge cases transferred to another acute care hospital or subsequently dying in the hospital are excluded from these analyses.

Massachusetts residency is based on patient's ZIP code. Only cases having a valid Massachusetts ZIP code are included in these analyses.

Injury-Related Observation Stays:

Source: MA Outpatient Observation Bed Database, MA Division of Health Care Finance and Policy.

This database contains cases admitted to a hospital bed for observation. They are *not* included in the hospital discharge database.

An injury-related "observation" case is defined as:
any case having an ICD9-CM Nature of Injury Code of: 800-908, 9090-9092, 9094, 9099, 910-994, 99550-99559, 99580-99585, assigned to any of the ICD9 diagnosis fields.

Massachusetts residency is based on patient's ZIP code. Only cases having a valid Massachusetts ZIP code are included in these analyses.

Injury-related observation cases subsequently dying in the hospital are excluded from these analyses.

A general definition of Outpatient Observation services is defined for reporting purposes in the Case Mix Regulation 114.1 CMR 17.02 as:

"*Observation services are those furnished on a hospital's premises which are reasonable and necessary to further evaluate a patient's condition and provide treatment to determine the need for possible admission to the hospital. These services include the use of a bed and periodic monitoring by a hospital's physician, nursing and other staff*."

Injury-Related Emergency Department Visits:

Source: Massachusetts Emergency Department Discharge Database, MA Division of Health Care Finance and Policy.

This database contains individuals discharged from any acute care emergency department in Massachusetts. These cases are *not* included in the hospital discharge or observation bed stay databases.

An emergency department injury-related case is defined as:

any case having an ICD9-CM Nature of Injury Code of: 800-908, 9090-9092, 9094, 9099, 910-994, 99550-99559, 99580-99585, assigned to any of the ICD9 diagnosis fields.

Massachusetts residency is based on patient's zip code. Only cases having a valid Massachusetts ZIP code are included in these analyses.

Injury-related emergency department cases subsequently dying in the hospital are excluded from these analyses.

Population Data used for the Calculation of Rates:

1) GCT-T1: Population Estimates for 2001-2005
   Source: U.S. Census Bureau, Population Estimates Program.
   Release Date: August 4, 2006
2) Census 2000 SF1 file
   Source: U.S. Census Bureau.

Residency:

Analyses for injury *deaths* include Massachusetts residents who died in or out-of-state. All other analyses include Massachusetts residents admitted and released from a Massachusetts acute care hospital or treated and discharged from an emergency department. Massachusetts residents treated at hospitals out of state are not included. Non-Massachusetts residents were excluded from *all* analyses presented in this report.

External Cause (E-Code) Rates:

Among hospital discharge data, 96% of cases for which there was an injury assigned to one of the diagnostic fields had an external cause code provided. Among observation bed stay data the percentage was 84.6% and among emergency department data, the percentage was 98.6%. Overall, external cause codes were assigned to 98.3% of all injury-related cases.

Data Limitations and Exclusions:

Limitations of Small Numbers: Cells in some tables contain small numbers. Rates and proportions based on fewer than five observations are suppressed, and trends based upon small numbers (<20) should be interpreted cautiously as rates can fluctuate greatly from year to year with even a small increase or decrease in the number of cases.

Exclusions: Due to data quality issues, the external cause of injury codes (E-Codes) for one hospital, were excluded from all ED analysis. Total injury counts presented in this report include primary diagnostic codes for this hospital, but associated diagnostic codes have been excluded.

Rates:
All rates reported are per 100,000 individuals.

Crude Death Rate
The crude death rate represents the "true" number of occurrences of a health event in a specified time and population per unit time. It is calculated as follows.

Formula:

$$\text{Crude Rate} = \frac{\text{\# of resident injury deaths (or injuries) in a year}}{\text{resident population for that year}} \times 100{,}000$$

Age-Adjusted Rate
A summary rate designed to minimize the distortions created by differences in age distribution when comparing rates for populations with different age compositions. Age-adjusted rates are useful when comparing death rates from different populations or in the same population over time. For example, if one wished to compare the 1998 death rates between Barnstable County (Cape Cod) and Hampshire County, the age-adjusted formula would account for the fact that 24% of the Barnstable County residents were 65 years of age or older, whereas only 11% of the Hampshire County residents were in this age group.

Age-adjusted rates are calculated by weighting the age-specific rates for a given year by the age distribution of a standard population. The weighted age-specific rates are then added to produce the adjusted rate for all ages combined.

Age-Specific Rate
A rate for a specified age group is calculated by dividing the actual number of cases in a given year for a specific age group by the population in that age group for that year. The numerator (number of cases) and the denominator (population) refer to the same age group.

Formula:

$$\text{Age-specific Rate } \textit{(for ages 25-34)} = \frac{\text{\# of injury deaths (or injuries) among residents } \textit{(ages 25-34)} \text{ in a given year}}{\text{population of residents } \textit{(ages 25-34)} \text{ in that year}} \times 100{,}000$$

YPLL (Years of Potential Life Lost) was calculated by summing the difference between life expectancy and the age at death for each injury death. Maximum age for YPLL was adjusted to 75 years to exclude deaths beyond average life expectancy.

Recommended Framework of E-code Groupings for Presenting Injury Morbidity Data*

Mechanism/Cause	Manner/Intent				
	Unintentional	Self-inflicted	Assault	Undetermined	Other
Cut/pierce	E920.0-.9	E956	E966	E986	E974
Drowning/submersion	E830.0-.9, E832.0-.9 E910.0-.9	E954	E964	E984	
Fall	E880.0-E886.9, E888	E957.0-.9	E968.1	E987.0-.9	
Fire/burn: Fire/flame	E890.0-E899	E958.1	E968.0, E979.3	E988.1	
Fire/burn: Hot object/substance	E924.0-.9	E958.2,.7	E961, E968.3	E988.2,.7	
Firearm	E922.0-.3,.8, .9	E955.0-.4	E965.0-4, E979.4	E985.0-.4	E970
Machinery	E919 (.0-.9)				
Motor vehicle traffic	E810-E819 (.0-.9)	E958.5	E968.5	E988.5	
Occupant	E810-E819 (.0,.1)				
Motorcyclist	E810-E819 (.2,.3)				
Pedal cyclist	E810-E819 (.6)				
Pedestrian	E810-E819 (.7)				
Unspecified	E810-E819 (.9)				
Pedal cyclist, other	E800-E807 (.3) E820-E825 (.6), E826.1,.9 E827-E829(.1)				
Pedestrian, other	E800-807(.2) E820-E825(.7) E826-E829(.0)				
Transport, other	E800-E807 (.0,.1,.8,.9) E820-E825 (.0-.5,.8,.9) E826.2-.8 E827-E829 (.2-.9), E831.0-.9, E833.0-E845.9	E958.6		E988.6	
Natural/environmental	E900.0-E909, E928.0-.2	E958.3		E988.3	
Dog bites	E906.0				
Overexertion	E927				
Poisoning	E850.0-E869.9	E950.0-E952.9	E962.0-.9	E980.0-E982.9	E972
Struck by, against	E916-E917.9		E960.0; E968.2		E973, E975
Suffocation	E911-E913.9	E953.0-.9	E963	E983.0-.9	
Other specified and classifiable	E846-E848, E914-E915, E918, E921(.0-.9), E922(.4, .5), E923(.0-.9), E925.0-E926.9, E928(.3-.5), E929(.0-.5)	E955(.5,.6,.7,.9), E958(.0,.4)	E960.1, E965(.5-.9), E967(.0-.9), E968(.4,.6, .7), E979(.0-.2), E979(.5-.9)	E985(.5,.6,.7), E988(.0,.4)	E971, E978, E990-E994, E996, E997(.0-.2)
Other specified, not elsewhere classifiable	E928.8, E929.8	E958.8, E959	E968.8, E969	E988.8, E989	E977, E995, E997.8, E998, E999
Unspecified	E887, E928.9, E929.9	E958.9	E968.9	E988.9	E976, E997.9
Adverse effects: Medical care					E870-E879
Adverse effects: Drugs					E930.0-E949.9
All injury by Intent	E800-E869, E880-E929	E950-E959	E960-E969, E979	E980-E989	E970-E978, E990-E999
All external causes	E800-E999				

**Modified version of the CDC Recommended E-Code Groupings for Presenting Injury Morbidity, National center for Injury Prevention and Control, Centers for Disease Control and Prevention.*

Recommended Framework of E-Code Groupings for Presenting Injury Mortality Data*

Mechanism/Cause	Manner/Intent				
	Unintentional	Self-inflicted	Assault	Undetermined	Other
Cut/pierce	W25-W29, W45	X78	X99	Y28	Y35.4
Drowning/submersion	W65-W74	X71	X92	X21	
Fall	W00-W19	X80	Y01	Y30	
Fire/burn: Fire/flame	X00-X09	X76	X97, U01.3	Y26	Y36.3
Fire/burn: Hot object/substance	X10-X19	X77	X98	Y27	
Firearm	W32-W34	X72-X74	X93-X95, U01.4	Y22-Y24	Y35.0
Machinery	W24, W30-W31				
Motor vehicle traffic:					
Occupant	V30-V79 (.4-.9), V83-V86 (.0-.3)				
Motorcyclist	V20-V28 (.3-.9), V29 (.4-.9)				
Pedal cyclist	V12-V14 (.3-.9), V19 (.4-.6)				
Pedestrian	V02-V04 (.1, .9), V09.2				
Other	V80 (.3-.5), V81.1, V82.1				
Unspecified	V87 (.0-.8), V89.2				
Pedal cyclist, other	V10-V11, V12-V14 (.0-.2), V15-V18, V19 (.0-.3, .8, .9)				
Pedestrian, other	V01, V02-V04 (.0), V05, V06, V09 (.0, .1, .3, .9)				
Land Transport, other	V20-V28 (.0-.2), V29 (.0-.3), V30-V79 (.0-.3), V80 (.0-.2, .6-.9), V81-V82 (.0, .2-.9), V83-V86 (.4-.9), V87.9, V88 (.0-.9), V89 (.0, .1, .3, .9)	X82	Y03	Y32	
Transport, other	V90-V99		U01.1		Y36.1
Natural/environmental	W42-W43, W53-W64, W92-W99, X20-X39, X51-X57				
Overexertion	X50				
Poisoning	X40-X49	X60-X69	X85-X90, U01(.6, .7)	Y10-Y19	Y35.2
Struck by, against	W20-W22, W50-W52	X79	Y00, Y04	Y29	Y35.3
Suffocation	W75-W84	X70	X91	Y20	
Other specified and classifiable	W23, W35-W41, W44, W49, W85-W91, Y85	X75, X81, U03.0	X96, Y02, Y05-Y07, U01 (.0, .2, .5)	Y25-Y31	Y35 (.1, .5), Y36 (.0, .2, .4-.8)
Other specified, not elsewhere classifiable	X58, Y86	X83, Y87.0	Y08, Y87.1, U01.8, U02	Y33, Y87.2	Y35.6, Y89 (.0, .1)
Unspecified	X59	X84, U03.9	Y09, U01.9	Y34, Y89.9	Y35.7, Y36.9
Adverse effects: Medical care					Y40-Y59, Y88.0
Adverse effects: Drugs					Y60-Y84, Y88 (.1-.3)
All injury by Intent	V01-X59, Y85-Y86	X60-X84, Y87.0, U03	X85-Y09, Y87.1, U01, U02	Y10-Y34, Y87.2, Y89.9	Y35-Y36, Y89.0, Y89.1
All external causes	V01-Y36, Y85-Y87, Y89, U01-U03				

**CDC Recommended E-Code Groupings for Presenting Injury Mortality, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.*

Interpretation of Selected E Codes

The following list provides sample scenarios to assist with the interpretation of selected ICD9 External Cause of Injury codes. This is *not* a comprehensive listing.

Injury Cause	**Manner/Intent**	**ICD-9 E Codes**	**Sample**
Fall	Assault-Related	E968.1	Pushed down a flight of stairs.
	Self-Inflicted	E957.0-E957.9	Jumped off building with intent to harm self
	Unintentional	E880.0-E886.9 E888	Fell off of bed. Tripped down stairs. Slipped on ice. Fell during football game.
Fire/Burn	Assault-Related	E961, E968.0, E968.3	Purposely burned by boiling water thrown by another person.
	Self-Inflicted	E958.1, E958.2, 958.7	Purposely burned oneself with cigarette.
	Unintentional	E890.0-E899 E924.0-E924.9	Spilled hot coffee. Burned on stove. Burned in bath water that was too hot.
Motor Vehicle Traffic -Motorcycle	Unintentional	E810-E819(.2, .3)	Rider injured in crash with truck. Motorcycle slid on gravel.
Motor Vehicle Traffic -Occupant	Self-Inflicted	E958.5	Driver purposely ran into telephone pole.
Motor Vehicle Traffic -Occupant	Unintentional	E810-E819(.0, .1)	Car rear-ended at stop sign. Head on collision with another car.
Motor Vehicle Traffic -Unspecified	Unintentional	E810-E819(.8, .9)	Injury to someone involved in motor vehicle crash but unknown if occupant, or other, etc.
Overexertion	Unintentional	E927	Pulled muscle during sports. Twisted ankle walking down stairs. Injured back lifting heavy boxes.
Pedal Cycle: motor vehicle & non-motor vehicle-related	Unintentional	E810-E819(.6) E800-E807(.3) E820-E825(.6) E826.1 E826.9 E827-E829(.1)	Fell off bike on mountain trail. Hit by a car while riding bike in the street. Ran into a pedestrian on the sidewalk. Ran into a dog with tricycle.
Pedestrian: motor vehicle & non-motor vehicle-related	Unintentional	E810-E819(.7) E800-E807(.2) E820-E825(.7) E826-E829(.0)	Hit by car while walking across street. Collision with bicycle courier. Run over by three-wheeler.
Poisoning	Assault-Related	E962.0-E962.9	Was served drink intentionally laced with pesticide.
	Self-Inflicted	E950.0-E952.9	Purposely breathed exhaust fumes from car. Intentional overdose of sleeping pills.
	Unintentional	E850.0-E869.9	Child drank cleanser from bottle under sink. Unknowingly ate poisonous mushroom.
Nature/Environment: (e.g., animal bites, insect stings, exposure to cold/heat, earthquake, etc.)	Unintentional	E905.0-E905.6 E905.9 E906.0-.5 E906.9	Bitten by any animal, including dog, cat, rat, or snake. Bitten or stung by an insect, including bee, wasp, spider, scorpion.
Struck by/against	Unintentional	E916-918	Struck by falling box. Crushed fingers in car door. Collided with another player during football game.
Suffocation	Assault-Related	E963	Person strangled.
	Self-Inflicted	E953.0-E953.9	Hanged self.
	Unintentional	E911-E913.9	Choked on piece of meat.